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THE HARRISON ANTINARCOTIC LAW.

A CONVICTION FOR SHIPPING OPIUM IN INTERSTATE COMMERCE AND FOR HAVING POSSESSION OF SMOKING OPIUM.

A case recently decided by the United States District Court for the Western District of Tennessee illustrates some of the difficulties encountered by drug addicts in securing narcotic drugs.

An opium addict living in Tennessee induced a friend in Louisiana to procure and send to him a shipment of opium prepared for smoking. Neither of the parties had registered under the Harrison anti-narcotic law. The opium addict was charged with violating the Harrison law by procuring the shipment of opium in interstate commerce, and also, under the Federal law of January 17, 1914, with unlawful possession of smoking opium. He was convicted on both charges.

The opinion of the court is published in this issue of the Public Health Reports, page 1089.

BACTERIUM TULARENSE.

INFECTED JACK RABBIT FOUND IN MONTEREY COUNTY, CAL.

Dr. M. T. Clegg, bacteriologist in charge of the Federal laboratory at San Francisco, Cal., makes the following report regarding a jack rabbit found infected with the *Bacterium tularense* in Monterey County, Cal.:

A jack rabbit which was received at this laboratory on March 25, was found to be infected with *Bacterium tularense*. The rabbit had been found dead on a ranch 7 miles southwest of Soledad, Monterey County.

Dr. William B. Wherry, of the University of Cincinnati, reported an extensive epizootic of this plague-like disease among rabbits in Indiana (Public Health Reports, vol. 29, p. 3387). Wherry and Lamb (Journal Infectious Diseases, 1914, vol. 15, p. 331) also reported two cases of human infection, both of which occurred in persons known to have handled wild game (rabbits).

In this State (California) the disease is not uncommon among ground squirrels, as has been reported by McCoy and Chapin, who were the first to observe the disease and isolate the infecting organism, to which they gave the name *Bacterium tularense*.

This plague-like disease has never been observed heretofore in the rabbits of California. It will be of interest to note if an epizootic occurs among the rabbits in the district in which this rabbit was found.

Wherry and Lamb were able, by placing an infected rabbit in a runway with 15 other rabbits, to infect 5 out of the 15. They believed this result to be due to gastrointestinal infection.

SOME FALLACIES REGARDING PHENOL.

A REVIEW WITH REPORTS OF OBSERVATIONS ON THE INFLUENCE OF ETHYL ALCOHOL ON THE GERMICIDAL AND ON THE TOXIC PROPERTIES OF PHENOL.

By MARTIN I. WILBERT, Technical Assistant, Hygienic Laboratory, United States Public Health Service.

There are probably few official drugs regarding which more misleading statements have been made than phenol, or, as it is more widely known, carbolic acid. This substance was first recognized by Runge (1834), who called it carbolic acid to indicate its nature and origin; an oil-like liquid, obtained from coal, that has much in common with well-known acids. Phenol was early confounded with creosote, isolated by Reichenbach (1832) from beechwood tar, and under the name coal-tar creosote an impure commercial phenol was long listed and freely sold to less well-informed dealers, who unknowingly substituted this more poisonous commercial product for beechwood creosote for internal use.

With the advent of crystalline phenol and its subsequent use as an antiseptic in surgical practice, better informed medical practitioners began to appreciate the difference between the two products, but even at the present time it is not uncommon to find commercial grades of phenol referred to as coal-tar creosote.

The widespread use of phenol as an antiseptic and a disinfectant by medical practitioners served to bring it to the attention of the laity as a poison, and as early as 1890 it was asserted that phenol or carbolic acid was employed more frequently by suicides than any other drug.

The toxicology of carbolic acid early attracted attention, and a record of the substances that have been recommended as antidotes for phenol poisoning, with a review of the reasons for recommending them, would be an interesting study in that it would tend to emphasize the futility of basing conclusions on incomplete or at times misleading observations.

The use of fixed oils, of glycerin, and of diluted sulphuric acid, and the use of the soluble sulphates of the alkalies and alkali earths, while apparently justified on the basis of the earlier observations, have long since been recognized as being inefficient and in many instances distinctly harmful.

The rather widespread use of ethyl alcohol as an antidote for phenol poisoning and the studious avoidance of ethyl alcohol as a diluent for phenol used as an antiseptic or disinfectant, while long since shown to be based on erroneous reasoning, still persist and, as will be noted later, the belief in the efficiency of ethyl alcohol as a detoxicant for phenol appears to be growing rather than decreasing.

It was early found that alcohol is a better solvent for phenol than is water, and it was also found that mixtures of phenol with alcohol, fixed oils, glycerin, or camphor were less caustic than phenol alone, and under some conditions appeared to be less toxic than solutions of phenol in water.

Glycerin, it was early observed, will lessen the caustic local action of phenol on the skin, but experience has since shown that it will not prevent the production of gangrene nor the absorption of phenol.

A mixture of phenol and glycerin was recommended by Nathan Rosewater and others (*Am. J. Pharm.*, 1895, v. 67, p. 221) as a safe and efficient substitute for phenol. In recommending this mixture, it was pointed out that "not being as caustic as phenol, it can not result in as much mischief or fatality if taken internally, either accidentally or on purpose."

Harrison Allen, as editor of *A Handbook of Local Therapeutics* (Philadelphia, 1897), makes the assertion that "carbolic acid dissolved in oil or in alcohol is inert. Anthrax spores were found to be unaffected after lying upward of three months in a 5 per cent solution of carbolic acid in oil and equally so by 70 days' exposure to a 5 per cent solution in alcohol. Even the sensitive anthrax bacilli were not destroyed by a 5 per cent solution of carbolic acid in oil."

Dr. Seneca D. Powell, of New York, was among the first to systematically recommend the use of alcohol as an antidote for phenol. He based his recommendation on the naive but evidently fallacious deduction that the action of alcohol in the stomach must be analogous to its action on the unbroken skin.

Phelps (*N. Y. M. J.*, 1899, v. 69, p. 62) appears to have been the first to call attention in print to the antagonism of alcohol to phenol. He quotes Dr. Seneca D. Powell, who in his clinics at the Post-graduate Hospital demonstrated the antidotal value of alcohol by consecutively rinsing his hands in liquid phenol and then in alcohol.

Since that time alcohol has frequently been recommended and largely exploited as an antidote to carbolic acid, despite the fact that it

is of little value other than as a diluent. The exploitation of alcohol as an antidote and as a possible prophylactic for phenol poisoning has led to its recognition in State and other laws designed to restrict the sale and use of various poisons.

Williams (*Drug. Circ.*, March, 1900, p. 46) was among the first to make the suggestion that, "in view of the frequently made assertion that grain alcohol is an efficient antidote for carbolic acid and that this poison may be taken with impunity if immediately followed by alcohol, it would appear that a mixture of phenol and grain alcohol would be a comparatively safe household preparation. The claim of the comparative innocuousness of carbolic acid under the conditions named is apparently well founded."

This fallacious suggestion has been embodied in several State and local laws and regulations designed to restrict the sale of carbolic acid. These laws usually provide that the requirements embodied therein do not apply to the sale of crude carbolic acid or to the sale of a solution or mixture containing equal proportions of carbolic acid, glycerin, and alcohol. That this misleading statement, originally made more than 20 years ago, is still a factor in the enactment of restrictive legislation is apparent from a paragraph embodied in the recently (1915) enacted laws of California and of Utah. These laws provide that the restrictions relating to the sale of carbolic acid do not apply to solutions of carbolic acid ("phenol") containing not over 10 per cent of carbolic acid ("phenol") and not less than 10 per cent of ethyl alcohol.

The same line of reasoning which led to the belief that ethyl alcohol is an efficient prophylactic and antidote for phenol because of its power of removing phenol from the skin also led to a rather widespread belief that mixtures of phenol with alcohol or solutions of phenol and alcohol in water are less efficient as antiseptics or disinfectants.

Taylor (*J. Biol. Chem.*, 1908-9, v. 5, p. 319) in a report of an experimental study with alcohol-resistant yeasts to determine the antagonism of alcohol to phenol, concludes that this supposition appears to have some physical basis but is not due to any chemical detoxication of phenol by ethyl alcohol. From his experiments he concludes that alcohol does not reduce in the least the antiseptic action of carbolic acid, the toxicity of the phenol not being at all involved. With a high concentration of alcohol and a low concentration of phenol the alcohol seemed to increase to some extent the antiseptic value of the phenol.

Taylor concludes "that there is no chemical detoxication of phenol by ethyl alcohol and that the effects observed in therapeutic practice must rest upon some physical basis." He also points out that recent investigations by Sollmann support this conclusion.

Zemp (N. Y. M. J. 1909, v. 89, p. 476) appears to have been among the first to question seriously the value of ethyl alcohol as an antidote to phenol. He says: "That alcohol is a splendid solvent for many drugs is recognized by all. It is because of this power that it has been recommended as an antidote to carbolic acid. No chemical action takes place when these two drugs are brought together. The carbolic acid is simply diluted, hence its caustic power is diminished."

Macht (J. H. Hosp. Bull. 1915, v. 26, p. 98-104) reports an experimental study of lavage in acute carbolic acid poisoning in which he clearly demonstrates that contrary to popular experience and belief the internal use of alcohol in cases of phenol poisoning may be unfavorable. The conflicting opinions in regard to the use of alcohol are somewhat reconciled by his investigations. He finds that the influence of alcohol depends on the time of administration. If it is given after the ingestion of phenol, as must be the case therapeutically, the symptoms will be aggravated, the alcohol acting as an excellent solvent for phenol, promoting rather than retarding its absorption, so that death may actually be hastened. On the other hand, he found that an animal previously intoxicated with alcohol can withstand better the effects of phenol taken afterwards.

To determine the relative influence of ethyl alcohol and of glycerin on the actions of phenol it was thought desirable to repeat in a modified way some of the experiments previously reported. The results of these experiments are appended and clearly show that ethyl alcohol in the presence of water has no appreciable influence on the toxicity or on the germicidal properties of phenol and that it may therefore be advantageously used as a solvent alone, or in mixtures to promote the solubility of phenol in water for use as a germicide or disinfectant.

The experiments to determine the germicidal value of mixtures of phenol and alcohol and of phenol and glycerin were made in the Hygienic Laboratory by Mr. Albert F. Stevenson and Miss Rose Parrott.

The technic followed was that described in Hygienic Laboratory Bulletin No. 82: "The determination of the phenol coefficient of some commercial disinfectants," by Thomas B. McClintic.

The results, as evidenced in the appended tables, clearly show that in the presence of water both alcohol and glycerin are practically inert so far as any detoxicating action may be concerned.

In the presence of a larger percentage of alcohol there appears to be some increased activity, due probably to a slight increase in the solvent and penetrative properties of the mixture.

An abstract of a report on the effect of alcohol on the toxicity of phenol, made by Dr. Liston Paine, Assistant Surgeon, United States

Public Health Service, is also appended. The results noted serve to emphasize the findings previously reported and suggest the fallacy of enacting legislation designed to promote the sale of mixtures of phenol and alcohol under the impression that ethyl alcohol will serve as a detoxicant to phenol.

In conclusion, it may be again noted that the experimental work clearly shows that the addition of ethyl alcohol to phenol not only increases the solubility of phenol in water, but also increases rather than diminishes the antiseptic value of the resulting solution. Ethyl alcohol can be used to advantage as a substitute for glycerin in making antiseptic solutions of phenol.

The experiments with animals clearly show that the addition of ethyl alcohol to solutions of phenol in water does not, in any way, inhibit the toxic action of phenol, but rather tends to facilitate absorption and thus hasten death.

TABLE No. 1.—*Standard phenol in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	+	—	—	—	—	—
	1:110	+	+	—	—	—	—
	1:120	+	+	+	+	+	—

TABLE No. 2.—*A mixture of phenol 1 and glycerin 1 in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	+	—	—	—	—	—
	1:110	+	+	—	—	—	—
	1:120	+	+	+	+	+	—

TABLE No. 3.—*A mixture of phenol 1 and alcohol 1 in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	+	—	—	—	—	—
	1:110	+	+	—	—	—	—
	1:120	+	+	+	+	+	+

TABLE No. 4.—*A mixture of phenol 1 and alcohol 3 in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	+	—	—	—	—	—
	1:110	+	—	—	—	—	—
	1:120	+	+	+	—	—	—

TABLE No. 5.—*A mixture of phenol 1 and alcohol 9 in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	—	—	—	—	—	—
	1:110	—	—	—	—	—	—
	1:120	+	—	—	—	—	—

TABLE No. 6.—*A mixture of phenol 1 and denatured alcohol 1 in water.*

RESULTS OF A TEST (WITHOUT ORGANIC MATTER).

(+ means growth; — means no growth.)

Sample.	Dilution.	Time culture exposed to action of disinfectant in minutes.					
		2½	5	7½	10	12½	15
Phenol.....	1:80	—	—	—	—	—	—
	1:90	—	—	—	—	—	—
	1:100	—	—	—	—	—	—
	1:110	+	—	—	—	—	—
	1:120	+	+	+	+	—	—

The Effect of Alcohol or Glycerin on the Toxicity of Phenol as shown by Inoculations into White Mice.

(An abstract of a report by Dr. Liston Paine, assistant surgeon, United States Public Health Service.)

For the experiments recorded in the appended tables the technic was practically as outlined in Hygienic Laboratory Bulletin No. 88: Method for Determining the Toxicity of Coal-Tar Disinfectants, by Worth Hale.

The mice used were prepared in the afternoon of the day before they were to be injected, so as to insure a maximum of time for observing the development of symptoms.

The symptoms manifested by the mice referred to in the accompanying tables were typical of phenol poisoning. The mice that were injected with a mixture of phenol and alcohol or phenol and glycerin showed the symptoms just as early and to as marked an extent as the mice receiving phenol alone.

To determine the effect of ethyl alcohol, a solution containing twice as much alcohol as the maximum amount used with phenol was injected. All of these mice recovered within 24 hours, though all were stupified from the effect of the alcohol and three appeared to be moribund.

On injecting the same mice on the following day with an aqueous solution to determine whether such previously alcoholized mice could better resist the toxic action of phenol it was found that three died from approximately the same dose that proved fatal for other animals. (See Table E.) It should be noted in this connection that in this series of mice the phenol was injected after the mice had apparently recovered from the effects of the alcohol. It is probable that most of the alcohol had been excreted through one or another channel within the intervening 24-hour period.

In the appended tables an effort has been made to include only the essential information recorded in the protocols. The dose per mouse and dose per gram of mouse represent the weight of phenol in the solutions used.

TABLE A.—One per cent phenol in water.

Mouse No.	Weight.	Approximate amount of 1 per cent solution of phenol per mouse.	Phenol per gram weight of mouse.	Result.	Time.
	<i>Grams.</i>				<i>H. m.</i>
298.....	16.4	0.427	0.00026	Survived.....	.. ..
299.....	19.65	.512	.00026	.....do.....	.. ..
300.....	18.5	.582	.00032	.....do.....	.. ..
301.....	19.85	.632	.00032	.....do.....	.. ..
302.....	18.75	.712	.00038	Died.....	.. ..
303.....	20	.761	.00038	Survived.....	.. 3
304.....	19	.875	.00046	Died.....	.. 1 0
305.....	20.4	.958	.00046	.....do.....	20 04

TABLE B.—One per cent phenol in distilled water (containing 3 c. c. of 95 per cent alcohol per 100 c. c. solution).

Mouse No.	Weight.	Approximate amount of 1 per cent solution of phenol per mouse.	Phenol per gram weight of mouse.	Result.	Time.
	<i>Grams.</i>				<i>H. m.</i>
306.....	16.75	0.437	0.00026	Survived.....	.. ..
307.....	19.7	.513	.00026	do.....	.. ..
308.....	18.5	.582	.00032	do.....	.. ..
309.....	19.9	.637	.00032	do.....	.. ..
310.....	18.9	.719	.00038	do.....	.. ..
311.....	20.1	.765	.00038	Died.....	3 45
312.....	19.05	.877	.00046	do.....	1 30
313.....	21	.966	.00046	do.....	45

TABLE C.—One per cent phenol in distilled water (containing 9 c. c. of 95 per cent alcohol per 100 c. c. solution).

Mouse No.	Weight.	Approximate amount of 1 per cent solution of phenol per mouse.	Phenol per gram weight of mouse.	Result.	Time.
	<i>Grams.</i>				<i>H. m.</i>
370.....	16.60	0.432	0.00026	Survived.....	.. ..
371.....	20.95	.545	.00026	do.....	.. ..
372.....	18.25	.583	.00032	Died.....	.. 35
373.....	21.65	.690	.00032	do.....	10 20
374.....	19.95	.758	.00038	do.....	10 15
375.....	23.35	.887	.00038	Survived.....	.. ..
376.....	20.75	.955	.00046	Died.....	3 30
377.....	25.60	1.176	.00046	do.....	5 0

TABLE D.—One per cent phenol, 1 c. c. glycerin in 100 c. c. solution (distilled water).

Mouse No.	Weight.	Approximate amount of 1 per cent solution of phenol per mouse.	Phenol per gram weight of mouse.	Result.	Time.
	<i>Grams.</i>				<i>H. m.</i>
330.....	16.2	0.422	0.00026	Survived.....	.. ..
331.....	19.15	.498	.00026	do.....	.. ..
332.....	16.8	.538	.00032	do.....	.. ..
333.....	19.55	.625	.00032	do.....	.. ..
334.....	17.2	.634	.00038	Died.....	.. 25
335.....	21.1	.892	.00038	Survived.....	.. ..
336.....	17.5	.805	.00046	Died.....	1 15
337.....	23	1.06	.00046	do.....	3 30

TABLE E.—One per cent phenol in water (mice had been injected the day before with varying amounts of an 18 per cent solution of ethyl alcohol).

Mo se No.	Weight.	Approximate amount of 1 per cent solution of phenol per mouse.	Phenol per gram weight of mouse.	Result.	Time.
	Grams.				H. m.
378.....	16.95	0.543	0.00032	Survived.....	.. ..
379.....	18.35	.588	.00032	do.....	.. ..
380.....	18.95	.721	.00038	Died.....	3 0
381.....	20.45	.780	.00038	Survived.....	.. ..
382.....	21.05	.968	.00046	Died.....	20 0
383.....	20.65	.950	.00046	do.....	35 0

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended April 8, 1916, was received from Surg. Boggess, of the United States Public Health Service, in charge of the work:

SAN FRANCISCO, CAL.

RAT PROOFING.

New buildings:	
Inspections of work under construction	217
Basements concreted (square feet, 19,475).....	21
Floors concreted (square feet, 11,147).....	8
Yards, passageways, etc. (square feet, 8,801).....	59
Total area of concrete laid (square feet).....	39,423
Class A, B, and C (fireproof) buildings:	
Inspections made.....	138
Roof and basement ventilators, etc., screened.....	515
Wire screening used (square feet).....	2,740
Openings around pipes, etc., closed with cement.....	945
Sidewalk lens lights replaced.....	1,000
Old buildings:	
Inspections made.....	438
Wooden floors removed.....	55
Yards and passageways, planking removed.....	29
New foundation walls installed (cubic feet).....	5,150
Concrete floors installed (square feet, 32,710).....	23
Basements concreted (square feet, 43,355).....	58
Yards and passageways, etc., concreted (square feet, 35,851).....	117
Total area concrete laid (square feet).....	111,916
Floors rat proofed with wire cloth (square feet, 1,375).....	3
Buildings razed.....	29

SAN FRANCISCO, CAL.—Continued.

RAT PROOFING—continued.

New garbage cans stamped approved.....	479
Nuisances abated.....	350
OPERATIONS ON THE WATER FRONT.	
Vessels inspected for rat guards.....	18
Reinspections made on vessels.....	23
New rat guards procured.....	15
Defective rat guards repaired.....	10
Rats trapped on wharves and water front.....	10
Rats trapped on vessels.....	31
Traps set on wharves and water front.....	70
Traps set on vessels.....	54
Vessels trapped on.....	8
Poisons placed within Panama-Pacific International Exposition grounds (pieces).....	56,200
Bait used on waterfront and vessels, bacon (pounds).....	4

RATS COLLECTED AND EXAMINED FOR PLAGUE.

San Francisco:	
Collected.....	370
Examined.....	205
Found infected.....	None.
Hollister:	
Collected.....	1
Examined.....	1
Found infected.....	None.

RATS IDENTIFIED.

Mus norvegicus.....	199
Mus rattus.....	59
Mus alexandrinus.....	73
Mus musculus.....	48

SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE.

County.	Collected.	Exam- ined.	Found infected.
Contra Costa.....	520	520	None.
Monterey.....	374	374	3
San Benito.....	122	122	None.
Stanislaus.....	5	5	None.
Total.....	1,021	1,021	3

RANCHES INSPECTED AND HUNTED OVER.

Contra Costa County.....	67
Monterey County.....	37

RANCHES INSPECTED AND HUNTED OVER—Con.

San Benito County.....	23
Stanislaus County.....	5
Total.....	132

PLAGUE-INFECTED SQUIRRELS.

Monterey County:

Shot Mar. 22, 1916. Wiley Bros. ranch (Arroyo Seco Rancho) 9½ miles south of Soledad....	1
Shot Mar. 24, 1916. Otto Olsen ranch, sec. 30, T. 18 S., R. 6 E., 7 miles southwest of Soledad.....	2

RECORD OF PLAGUE INFECTION.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	None.....	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	do.....	126 rats.
Berkeley.....	Aug. 28, 1907	None.....	do.....	None.
Los Angeles.....	Aug. 11, 1908	do.....	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909	July 12, 1915	287 squirrels.
Contra Costa.....	July 13, 1915	Wood rat.....	Mar. 1, 1916	1 wood rat.
Fresno.....	None.....	None.....	Oct. 27, 1911	1,598 squirrels.
Merced.....	do.....	do.....	July 12, 1911	1 squirrel.
Monterey.....	do.....	do.....	Mar. 24, 1916	5 squirrels.
San Benito.....	June 4, 1913	do.....	Aug. 14, 1915	23 squirrels.
San Joaquin.....	Sept. 18, 1911	do.....	Aug. 26, 1911	50 squirrels.
Santa Clara.....	Aug. 31, 1910	do.....	July 23, 1913	18 squirrels.
San Luis Obispo.....	None.....	do.....	Jan. 29, 1910	25 squirrels.
Santa Cruz.....	do.....	do.....	May 17, 1910	1 squirrel.
Stanislaus.....	do.....	do.....	June 2, 1911	3 squirrels.
				13 squirrels.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Stanislaus, San Benito, Monterey, Lassen, and Modoc.

LOUISIANA—NEW ORLEANS—PLAGUE ERADICATION.

The following report of plague-eradication work at New Orleans for the week ended April 8, 1916, was received from Surg. Creel, of the United States Public Health Service, in charge of the work:

OUTGOING QUARANTINE.

Vessels fumigated with sulphur.....	6
Vessels fumigated with cyanide gas.....	15
Pounds of sulphur used.....	210
Cyanide used in cyanide-gas fumigation, (pounds).....	992
Sulphuric acid used in cyanide-gas fumigation (pints).....	1,455
Clean bills of health issued.....	29
Foul bills of health issued.....	4

FIELD OPERATIONS.

Rodents trapped.....	8,566
Premises inspected.....	8,294
Notices served.....	838
Garbage cans installed.....	3

BUILDINGS RAT PROOFED.

By elevation.....	177
By marginal concrete wall.....	173
By concrete floor and wall.....	238
By minor repairs.....	353
Total buildings rat proofed.....	943
Square yards of concrete laid.....	13,530
Number of premises, planking and shed flooring removed.....	142
Number of buildings demolished.....	186
Total buildings rat proofed to date (abated).....	110,536

LABORATORY OPERATIONS.

Rodents received by species:	
Mus rattus.....	190
Mus norvegicus.....	1,619

LABORATORY OPERATIONS—contd.

Rodents received by species—Contd.	
Mus alexandrinus.....	159
Mus musculus.....	6,259
Wood rats.....	136
Musk rats.....	9
Putrid (included in enumeration of species).....	289
Total rodents received at laboratory.....	8,372
Rodents examined.....	2,363
Number of rats suspected of plague.....	139
Plague rats confirmed.....	None

PLAGUE STATUS TO APR. 8, 1916.

Last case of human plague, Sept. 8, 1915.	
Last case of rodent plague, Mar. 16, 1916.	
Total number of rodents captured to Apr. 8.....	673,836
Total number of rodents examined to Apr. 8.....	343,430
Total cases of rodent plague to Apr. 8, by species:	
Mus musculus.....	6
Mus rattus.....	18
Mus alexandrinus.....	12
Mus norvegicus.....	248
Total rodent cases to Apr. 8, 1916.....	284

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following reports of plague-eradication work at Seattle were received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

WEEK ENDED MAR. 25, 1916.

RAT PROOFING.

New buildings inspected.....	19
New buildings reinspected.....	68
Basements concreted, new buildings (25,712 square feet).....	24
Floors concreted, new buildings (18,595 square feet).....	8
Yards, etc., concreted, new buildings (1,519 square feet).....	7
Sidewalks concreted (square feet).....	11,270
Total concrete laid, new structures (square feet).....	57,096
New buildings elevated.....	5
New premises rat proofed, concrete.....	32
Old buildings inspected.....	3
Premises rat proofed, concrete, old buildings.....	2
Floors concreted, old buildings (2,290 square feet).....	2
Premises otherwise rat proofed, old building.....	1
Openings screened, old buildings.....	2
Rat holes cemented, old buildings.....	10
Wooden floors removed, old buildings.....	2
Wire screening used (square feet).....	150
Buildings razed.....	3

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	17
Rodents trapped and killed.....	398
Rodents recovered after fumigation.....	29
Total.....	444
Rodents examined for plague infection.....	296
Rodents proven plague infected.....	None.
Poison distributed (pounds).....	11
Bodies examined for plague infection.....	4
Bodies found plague infected.....	None.

CLASSIFICATION OF RODENTS.

Mus rattus.....	24
Mus alexandrinus.....	64
Mus norvegicus.....	260
Mus musculus.....	96

WATER FRONT.

Vessels inspected and histories recorded.....	12
Vessels fumigated.....	3
Sulphur used, pounds.....	2,600
New rat guards installed.....	18
Defective rat guards repaired.....	14
Fumigation certificates issued.....	3
Port sanitary statements issued.....	47

The usual day and night patrol was maintained to enforce rat guarding and fending.

MISCELLANEOUS WORK.

Rat-proofing notices sent to contractors, new buildings.....	22
Letters sent in re rat complaints.....	2
New restaurants inspected.....	5

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped.....	34
Mus alexandrinus trapped.....	17
Mus musculus trapped.....	20

Total..... 71

Rodents examined for plague infection.....	62
Rodents proven plague infected.....	None.

RAT-PROOFING OPERATIONS IN EVERETT.

New buildings inspected.....	5
New buildings, concrete foundations.....	3
New buildings elevated.....	2
New buildings, floors concreted (square feet, 180).....	1

¹Indicates number of rodents, the tissues of which were inoculated into guinea pigs. Most of them showed on necropsy only evidence of recent inflammatory process; practically none presented gross lesions characteristic of plague infection.

RAT-PROOFING OPERATIONS IN EVERETT--contd.

New buildings, yards concreted (square feet, 140).....	1
Total concrete laid, new buildings (square feet).....	320
Old buildings, basements concreted (square feet, 4,200).....	1

RODENTS EXAMINED IN TACOMA.

Mus norvegicus trapped.....	83
Mus norvegicus found dead.....	1
Mus rattus trapped.....	3
Mus alexandrinus trapped.....	4
Total.....	91
Rodents examined for plague infection.....	91
Rodents proven plague infected.....	None.

WEEK ENDED APR. 1, 1916.

RAT PROOFING.

New buildings inspected.....	10
New buildings reinspected.....	72
Basements concreted, new buildings (26,270 square feet).....	24
Floors concreted, new buildings (10,575 square feet).....	7
Yards, etc., concreted, new buildings (1,290 square feet).....	3
Sidewalks concreted, square feet.....	9,475
Total concrete laid, new structures, square feet.....	47,610
New buildings elevated.....	5
New premises rat proofed, concrete.....	31
Old buildings inspected.....	3
Premises rat proofed, concrete, old buildings.....	1
Floors concreted, old buildings (1,275 square feet).....	1
Openings screened, old buildings.....	5
Wooden floors removed, old buildings.....	1
Wire screening used, square feet.....	250
Buildings razed.....	3

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	14
Rodents trapped and killed.....	370
Rodents recovered after fumigation.....	12

Total.....	396
Rodents examined for plague infection.....	300
Rodents proven plague infected.....	None.
Poison distributed, pounds.....	15
Bodies examined for plague infection.....	5
Bodies proven plague infected.....	None.

CLASSIFICATION OF RODENTS.

Mus rattus.....	17
Mus alexandrinus.....	78
Mus norvegicus.....	237
Mus musculus.....	64

WATER FRONT.

Vessels inspected and histories recorded.....	17
Vessels fumigated.....	2
Sulphur used, pounds.....	500
New rat guards installed.....	8
Defective rat guards repaired.....	27
Fumigation certificates issued.....	2
Port sanitary statements issued.....	43
The usual day and night patrol was maintained to enforce rat guarding and fending.	

MISCELLANEOUS WORK.

Rat-proofing notices sent to contractors, new buildings.....	17
Letters sent in re rat complaints.....	7
Old buildings undergoing minor repairs inspected.....	8
Restaurant permits viséed.....	5

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped.....	25
Mus alexandrinus trapped.....	3
Mus musculus trapped.....	14

Total.....	42
Rodents examined for plague infection.....	38
Rodents proven plague infected.....	None

RAT-PROOFING OPERATIONS IN EVERETT.

New buildings inspected.....	3
New buildings concrete foundations.....	3

RODENTS EXAMINED IN TACOMA.

Mus norvegicus trapped.....	103
Mus norvegicus found dead.....	1
Mus rattus trapped.....	1
Mus alexandrinus trapped.....	4

Total.....	109
Rodents examined for plague infection.....	109
Rodents proven plague infected.....	None.

WEEK ENDED APR. 8, 1916.

RAT PROOFING.

New buildings inspected.....	28
New buildings reinspected.....	53
Basements concreted, new buildings (22,345 square feet).....	16
Floors concreted, new buildings (18,750 square feet).....	19
Yards, etc., concreted, new buildings (2,450 square feet).....	5
Sidewalks concreted (square feet).....	9,875

RAT PROOFING--continued.

Total concrete laid, new structures (square feet).....	53,420
New buildings elevated.....	4
New premises rat proofed, concrete.....	25
Old buildings inspected.....	6
Premises rat proofed, concrete, old buildings.....	3
Floors concreted, old buildings (3,775 square feet).....	3
Wooden floors removed, old buildings.....	3
Buildings razed.....	2

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	21
Rodents trapped and killed.....	314
Rodents recovered after fumigation.....	5
Total.....	340
Rodents examined for plague infection.....	244
Rodents proven plague infected.....	None.
Poison distributed (pounds).....	12
Bodies examined for plague infection.....	3

CLASSIFICATION OF RODENTS.

Mus rattus.....	23
Mus alexandrinus.....	72
Mus norvegicus.....	177
Mus musculus.....	68

WATER FRONT.

Vessels inspected and histories recorded.....	16
Vessels fumigated.....	1
Sulphur used, pounds.....	150
New rat guards installed.....	23
Defective rat guards repaired.....	16
Fumigation certificates issued.....	1
Port sanitary statements issued.....	41

The usual day and night patrol was maintained to enforce rat guarding and fending.

MISCELLANEOUS WORK.

Rat-proofing notices sent to contractors, new buildings.....	17
Letters sent in re rat complaints.....	3

MISCELLANEOUS WORK—continued.

Lectures on sanitary measures delivered.....	1
Inspection of medicine chests, fishing vessels.....	14

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped.....	58
Mus alexandrinus trapped.....	4
Mus musculus trapped.....	4
Total.....	66
Rodents examined for plague infection.....	57
Rodents proven plague infected.....	None.

RAT-PROOFING OPERATIONS IN EVERETT.

New buildings inspected.....	8
New buildings, concrete foundations.....	4
New buildings elevated 18 inches.....	4
New buildings, floors concreted (1,250 square feet).....	1
Total concrete laid, new buildings (square feet).....	1,250

RODENTS EXAMINED IN TACOMA.

Mus norvegicus trapped.....	64
Mus norvegicus found dead.....	1
Mus alexandrinus trapped.....	5
Mus rattus trapped.....	2
Total.....	72
Rodents examined for plague infection.....	69
Rodents proven plague infected.....	None.

HAWAII—PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED APR. 1, 1916.

Total rats and mongoose taken.....	354	Classification of rats trapped—Continued.	
Rats trapped.....	352	Mus musculus.....	119
Mongoose trapped.....	2	Mus norvegicus.....	65
Examined microscopically.....	302	Mus rattus.....	22
Showing plague infection.....	None.	Average number of traps set daily.....	984
Classification of rats trapped:		Cost per rat destroyed.....	21½ cents.
Mus alexandrinus.....	146		

WEEK ENDED APR. 8, 1916.

Total rats and mongoose taken.....	365	Average number of traps set daily.....	984
Rats trapped.....	363	Cost per rat destroyed.....	21½ cents.
Mongoose trapped.....	2	Last case rat plague, Alea, 9 miles from Honolulu,	
Examined microscopically.....	306	Apr. 12, 1910.	
Showing plague infection.....	None.	Last case human plague, Honolulu, July 12, 1910.	
Classification of rats trapped:		Last case rat plague, Paauhau, Hawaii, Jan. 18, 1916.	
Mus alexandrinus.....	179	Last case human plague, Paauhau Plantation,	
Mus musculus.....	103	Hawaii, Dec. 16, 1915.	
Mus norvegicus.....	40		
Mus rattus.....	41		

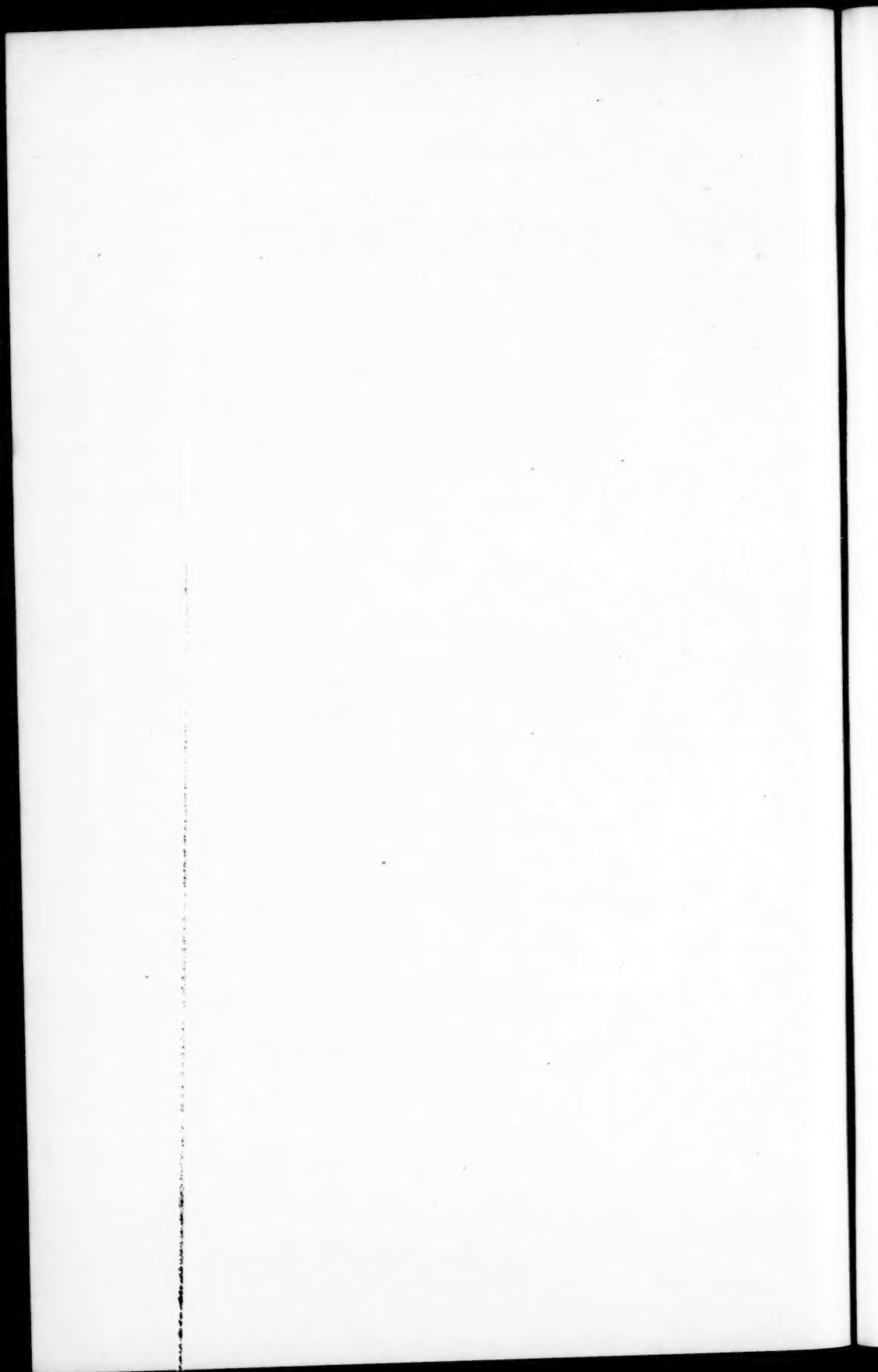
Hilo.

WEEK ENDED MAR. 25, 1916.

Rats and mongoose taken.....	2,639	Rats and mongoose plague infected.....	None
Rats trapped.....	2,605	Classification of rats trapped and found dead:	
Rats found dead.....	1	Mus norvegicus.....	418
Mongoose taken.....	33	Mus alexandrinus.....	334
Rats and mongoose examined microscopically	2,635	Mus rattus.....	785
Rats and mongoose examined microscopically	1	Mus musculus.....	1,099

WEEK ENDED APR. 1, 1916.

Rats and mongoose taken.....	2,594	Classification of rats trapped and found	
Rats trapped.....	2,554	dead—Continued.	
Mongoose taken.....	40	Mus rattus.....	781
Rats and mongoose examined macroscopically.....	2,594	Mus musculus.....	948
Rats and mongoose examined microscopically	1	Last case of rat plague, Paauhau Sugar Co., Jan.	
Rats and mongoose plague infected.....	None	18, 1916.	
Classification of rats trapped and found dead:		Last case of human plague, Paauhau Sugar Co.,	
Mus norvegicus.....	431	Dec. 16, 1915.	
Mus alexandrinus.....	394		



PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during March, 1916, to other State or provincial health departments by Dr. H. M. Bracken, Collaborating Epidemiologist for the State of Minnesota.

Disease and locality of notification.	Referred to health authority of.	Why referred.
Measles: South Harbor Township, Mille Lacs County.	Boone Township, Wright County, Iowa.	Infected in Iowa.
Scarlet fever: Albert Lea City, Freeborn County.	Cedar Falls, Black Hawk County, Iowa.	Infected while visiting in Minnesota.
Lodi Township, Mower County.	Haynes, Adams County, N. Dak.	Came home sick from North Dakota.
Minneapolis Health Depart- ment, Hennepin County.	Grantsburg, Burnett County, Wis....	Child brought to Minneap- olis for treatment. Quar- tined here.
Smallpox: Minneapolis Health Depart- ment, Hennepin County.	Dollar Bay, Houghton County, Mich.; Monising, Alger County, Mich.; Ba- raga, Baraga County, Mich.; Escana- la, Delta County, Mich.; South Creek, Mich.	Patient contracted smallpox at one of these places before coming to Minnesota.
Tuberculosis: Mayo Clinic, Rochester, Olm- sted County.	Pocatello, Bannock County, Idaho; Boone, Boone County, Iowa; Wau- kon, Allamakee County, Iowa; De- fiance, Delta County, Mich.; Center- ville, Turner County, S. Dak.; Eagle Butte, Dewey County, S. Dak.; Sisseton, Roberts County, S. Dak.; Darlington, Lafayette County, Wis.; Winnipeg, Manitoba, Canada; Ar- yonville, Manitoba, Canada; Bran- don, Manitoba, Canada.	4 advanced, 3 moderately advanced, 2 incipient, 1 apparently arrested, and 1 apparently cured. Cases left Mayo Clinic for homes.
Pokegama Sanatorium, Pine County.	Manteno, Kankakee County, Ill.	Advanced case died at sana- torium.
	Hekton, Morton County, N. Dak.	Advanced case left sana- torium for home in North Dakota.
Thomas Hospital, Minneap- olis, Hennepin County.	Beach, Golden Valley County, N. Dak.	Advanced case left Thomas Hospital for home in North Dakota.
Typhoid fever: Midway Hospital, St. Paul, Ramsey County.	Glasgow, Valley County, Mont.	At home in Montana during 3 weeks previous to earliest symptoms.
Radium Village, Marshall County.	Ardoch, Walsh County, N. Dak.	Patient had been working as railroad section foreman at Ardoch, N. Dak., a few days previous to symp- toms.
Fosston Village, Polk County..	Worked in McHenry and Eddy Coun- ties, N. Dak.	Attending physician thinks he contracted typhoid in McHenry County, N. Dak.
Thief River Falls, Penning- ton County.	Devils Lake, Ramsey County, N. Dak.	Lived at Devils Lake, N. Dak., 3 weeks previous to first symptoms.

ANTHRAX.

State Reports for March, 1916.

During the month of March, 1916, cases of anthrax were notified in States as follows: Louisiana, 1; Massachusetts, 9; Ohio, 1.

CEREBROSPINAL MENINGITIS.

Arizona—Bisbee.

Dr. Ralph Herendeen, city health officer of Bisbee, Ariz., reported by telegraph that during the period from April 1 to 18, 1916, 7 cases of cerebrospinal meningitis were notified in that place. The first case occurred in a Mexican boy 3 years old, who became ill April 1; by April 12 four additional cases, in adults, were found; on April 17 another case occurred in a child; and on April 18 a case was reported in an adult. Lumbar punctures were made and the meningococcus was demonstrated in all cases.

State Reports for March, 1916.

Place.	New cases reported.	Place.	New cases reported.
California:		Ohio:	
Los Angeles County—		Belmont County—	
Los Angeles.....	1	Martins Ferry.....	1
Marin County.....	1	Cuyahoga County—	
Mendocino County—		Cleveland.....	9
Fort Bragg.....	1	Hamilton County—	
Orange County.....	1	Cincinnati.....	3
San Bernardino County—		Jefferson County.....	1
Redlands.....	1	Lucas County—	
San Diego County—		Toledo.....	1
San Diego.....	1	Pickaway County.....	1
Total.....	6	Pike County.....	1
		Putnam County.....	1
District of Columbia.....	1	Summit County—	
		Akron.....	1
Maryland:		Total.....	19
Montgomery County—			
Kensington.....	1	South Carolina:	
		Chester County.....	1
Massachusetts:			
Bristol County—		Virginia:	
Fall River.....	1	Culpeper County.....	1
New Bedford.....	1	Dinwiddie County.....	1
Middlesex County—		Grayson County.....	1
Bedford Township.....	1	Lee County.....	1
Somerville.....	1	Orange County.....	1
Wilmington Township.....	1	Pittsylvania County.....	2
Hudson Township.....	1	Scott County.....	2
Suffolk County—		Shenandoah County.....	1
Boston.....	5	Tazewell County.....	2
Hampden County—		Washington County.....	1
Westfield Township.....	1	Wise County.....	1
Worcester County—		Total.....	14
Winchendon Township.....	1		
Worcester.....	1	Wisconsin:	
Total.....	14	Milwaukee County.....	11
		Ozaukee County.....	1
Minnesota:		Rock County.....	1
Clay County—		Sheboygan County.....	2
Morehead.....	1	Waukesha County.....	1
		Total.....	16

CEREBROSPINAL MENINGITIS—Continued.**Arkansas Report for February, 1916.**

During the month of February, 1916, one case of cerebrospinal meningitis was notified in Pulaski County, Ark.

City Reports for Week Ended Apr. 8, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.	3	2	Newark, N. J.	1	
Bridgeport, Conn.	4	1	New Orleans, La.		1
Chicago, Ill.	1		New York, N. Y.	10	7
Cleveland, Ohio.	2	1	Philadelphia, Pa.	3	
East Orange, N. J.	1		St. Louis, Mo.	1	
Galesburg, Ill.	1	1	Springfield, Ill.		1
Kansas City, Mo.		1	Toledo, Ohio.	1	1
Milwaukee, Wis.	1	1	Wheeling, W. Va.		1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1075.

ERYSIPELAS.**City Reports for Week Ended Apr. 8, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.	1		Jersey City, N. J.		1
Allentown, Pa.	4		Kansas City, Mo.		1
Ann Arbor, Mich.	1		Los Angeles, Cal.	5	
Atlanta, Ga.		1	Milwaukee, Wis.	9	1
Baltimore, Md.		2	Newark, N. J.	8	
Beaver Falls, Pa.	1		Newton, Mass.	1	
Berkeley, Cal.	1		New York, N. Y.		7
Binghamton, N. Y.	1		Philadelphia, Pa.	16	5
Bridgeport, Conn.	7	1	Pittsburgh, Pa.	13	2
Brockton, Mass.	1		Portland, Oreg.	1	
Buffalo, N. Y.	4		Providence, R. I.		2
Chicago, Ill.	38	1	Reading, Pa.	5	
Cincinnati, Ohio.	1		Rochester, N. Y.	2	
Cleveland, Ohio.	10	2	St. Louis, Mo.	14	4
Detroit, Mich.	10	3	St. Paul, Minn.	2	
Duluth, Minn.	1		San Francisco, Cal.	1	1
East Orange, N. J.	1		Somerville, Mass.		1
Harrisburg, Pa.	2		Toledo, Ohio.	1	1
Hartford, Conn.	5				

LEPROSY.**Arkansas—Hot Springs.**

A case of leprosy in the person of W. W., aged 33 years, colored, native of Mississippi, was verified bacteriologically February 7, 1916, at Hot Springs, Ark. The patient had lived until recently in Mississippi. He is now isolated in his rooming house.

Louisiana—New Orleans.

During the week ended April 8, 1916, one case of leprosy was notified in New Orleans, La.

LEPROSY—Continued.**Ohio—Dayton.**

On March 28, 1916, diagnosis of leprosy, verified bacteriologically April 4, 1916, was made at Dayton, Ohio, in the person of J. G. V., a Mexican, aged 38 years, who had previously lived in Nashville, Tenn., in New Mexico, and at Monterey, Mex. The patient is isolated in his home.

MALARIA.**California—Orland—Tertian and Estivo-Autumnal Malaria.**

Dr. J. C. Geiger of the California State Department of Health has reported the examination of blood smears taken in September, 1915, from the 373 children of the grammar and high schools at Orland, Cal. Orland is located in the Sacramento Valley and had a population of 836 at the time of the 1910 census. Malarial infections were found as follows:

Grammar School:

Child, 8 years of age, tertian malaria.

Child, 10 years of age, tertian malaria.

Child, 14 years of age, tertian malaria.

High School:

Child, 14 years of age, estivo-autumnal malaria.

The first step in the control of any disease is to find where it occurs and how prevalent it is. Work similar to that done at Orland should be done in every community in, or in the vicinity of, malaria infected territory. The finding and proper treatment of the cases at Orland will at least prevent the infection of a number of additional individuals during the present summer.

State Reports for March, 1916.

During the month of March, 1916, cases of malaria were notified in States as follows: California, 48; Louisiana, 10; Maryland, 1; Minnesota, 1; New Jersey, 4; South Carolina, 27; Virginia, 348.

Arkansas Report for February, 1916.

During the month of February, 1916, 214 cases of malaria were notified in the State of Arkansas.

City Reports for Week Ended Apr. 8, 1916.

During the week ended April 8, 1916, cases of malaria were notified in cities as follows: Pasadena, Cal., 1; San Francisco, Cal., 1.

MEASLES.**Washington—Seattle.**

Surg. Lloyd reported that during the week ended April 15, 1916, 301 cases of measles were notified in Seattle, Wash., making a total of 1,116 cases, with 2 deaths, reported since the beginning of the outbreak February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1075.

PELLAGRA.**State Reports for March, 1916.**

During the month of March, 1916, cases of pellagra were notified in States as follows: California, 3; District of Columbia, 1; Louisiana, 24; Massachusetts, 4; South Carolina, 13; Vermont, 1; Virginia, 20.

Arkansas Report for February, 1916.

During the month of February, 1916, 39 cases of pellagra were notified in the State of Arkansas.

City Reports for Week Ended Apr. 8, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	1	.....	Mobile, Ala.....	.....	2
Charleston, S. C.....	.....	1	Northampton, Mass.....	.....	1
Chicago, Ill.....	.....	1			

PLAGUE.**Louisiana—New Orleans—Plague-Infected Rats Found.**

Surg. Creel reported the finding of plague-infected rats in New Orleans, La., as follows: One rat captured March 24, 1916, at 1406 Saratoga Street, was proven positive for plague infection April 9, 1916, and another trapped March 16, 1916, at 237 South Villere Street, was proven positive for plague infection April 15, 1916.

Louisiana—New Orleans—Plague-Infected Rat on Vessel.

Surg. Creel reported that a rat taken from the steamship *Trevelyan*, at New Orleans, La., about April 7, 1916, was proven positive for plague infection April 22, 1916. A total of 38 rodents was taken from the vessel, which arrived at the New Orleans quarantine station April 6, 1916, with recent itinerary as follows: From Karachi, India, October 2, 1915; from Dartmouth, England, November 15, 1915; from Dieppe, France, December 22, 1915; from Newcastle on Tyne, March 4, 1916, via Gibraltar, for New Orleans.

PNEUMONIA.

City Reports for Week Ended Apr. 8, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	9	Morristown, N. J.....	3	.....
Binghamton, N. Y.....	1	3	Newark, N. J.....	40	15
Birmingham, Ala.....	2	7	New Castle, Pa.....	1	.....
Chicago, Ill.....	153	76	Norfolk, Va.....	5	5
Cleveland, Ohio.....	66	21	Oakland, Cal.....	2	2
Coffeyville, Kans.....	2	.....	Philadelphia, Pa.....	82	53
Detroit, Mich.....	8	21	Pittsburgh, Pa.....	44	36
Duluth, Minn.....	3	3	Reading, Pa.....	2	1
Galesburg, Ill.....	1	1	Rochester, N. Y.....	3	5
Grand Rapids, Mich.....	7	3	San Francisco, Cal.....	5	3
Harrisburg, Pa.....	3	4	Schenectady, N. Y.....	1	.....
Kalamazoo, Mich.....	2	2	Springfield, Ohio.....	1	1
Kansas City, Mo.....	6	13	Steeltown, Pa.....	1	2
Lexington, Ky.....	2	2	Stockton, Cal.....	1	.....
Lorain, Ohio.....	1	.....	Toledo, Ohio.....	6	2
Los Angeles, Cal.....	3	1	Wichita, Kans.....	2	.....
Manchester, N. H.....	4	4			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for March, 1916.

Place.	New cases reported.	Place.	New cases reported.
California:		New Jersey—Continued.	
Alameda County—		Mercer County.....	1
Oakland.....	1	Total.....	6
District of Columbia.....	1	Ohio:	
Louisiana:		Coshocton County.....	1
St. Mary Parish.....	2	Cuyahoga County—	
Maryland:		Cleveland.....	3
Baltimore City.....	1	Hamilton County—	
Massachusetts:		Cincinnati.....	1
Hampshire County—		Mahoning County—	
Amherst Township.....	1	Youngstown.....	1
Norfolk County—		Muskingum County—	
Weymouth Township.....	1	Zanesville.....	1
Suffolk County—		Total.....	7
Boston.....	1	Virginia:	
Worcester County—		Alleghany County.....	1
Gardner Township.....	1	Campbell County.....	1
Worcester.....	1	Caroline County.....	1
Middlesex County—		Cumberland County.....	1
Somerville.....	1	Halifax County.....	1
Total.....	6	Hanover County.....	1
Minnesota:		Henrico County.....	1
Todd County—		Nottoway County.....	1
Burtrum.....	1	Page County.....	1
New Jersey:		Prince Edward County.....	3
Essex County.....	5	Rockingham County.....	1
		Scott County.....	1
		Total.....	14

City Reports for Week Ended Apr. 8, 1916.

During the week ended April 8, 1916, poliomyelitis was reported in cities as follows: Bridgeport, Conn., 1 case; Chicago, Ill., 3 cases, 1 death; Detroit, Mich., 1 case; New Orleans, La., 1 case.

ROCKY MOUNTAIN SPOTTED FEVER.

Montana—Darby.

Dr. W. F. Cogswell, secretary of the Montana State Board of Health, reported by telegraph that a case of Rocky Mountain spotted fever was notified at Darby, Ravalli County, Mont., April 24, 1916, making four cases of the disease reported in Montana this season.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1075.

SMALLPOX.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended April 22, 1916, a new focus of smallpox infection was reported in the State of Minnesota, one case of the disease having been notified in Sibley Township, Crow Wing County.

State Reports for March, 1916.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Alameda County—						
Oakland.....	3		1		2	
Amador County.....	4				4	
Butte County.....	2					2
El Dorado County—						
Placerville.....	2					2
Fresno County—						
Fresno.....	1				1	
Los Angeles County—						
Glendale.....	1			1		
Long Beach.....	7		1	4	2	
Los Angeles.....	7				7	
San Bernardino County.....	2					2
Colton.....	2				2	
Redlands.....	1			1		
San Francisco.....	1			1		
San Joaquin County.....	1			1		
Total.....	34		2	8	18	6
Michigan:						
Branch County—						
Coldwater Township.....	1					1
Ovid Township.....	3				2	1
Coldwater.....	15				15	
Calhoun County—						
Homer Township.....	1				1	
Lee Township.....	5				5	
Marshall Township.....	2				2	
Delta County—						
Escanaba.....	3			1	2	
Genesee County—						
Mount Morris.....	1				1	
Ingham County—						
Lansing.....	8				8	
Ionia County—						
Otisco Township.....	2			1	1	
Ionia.....	5				2	3

SMALLPOX—Continued.

State Reports for March, 1916—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan—Continued.						
Kent County—						
Grand Rapids Township..	1				1	
Sparta.....	1				1	
Grand Rapids.....	1				1	
Lenawee County—						
Woodstock Township.....	1				1	
Mecosta County—						
Big Rapids Township.....	2				2	
Green Township.....	5				5	
Martiny Township.....	6				6	
Big Rapids.....	2				2	
Monroe County—						
Bedford Township.....	1				1	
Dundee Township.....	9				9	
Erie Township.....	4				4	
London Township.....	4				4	
Ash Township.....	1				1	
Monroe.....	6			1	5	
Montcalm County—						
Ferris Township.....	1				1	
Total.....	91			3	83	5
Minnesota:						
Beltrami County—						
Bemidji.....	1			1		
Blue Earth County—						
Mankato.....	7			1	6	
Le Roy Township.....	4				4	
Brown County—						
Sleepy Eye.....	3			1	2	
Eden Township.....	1				1	
Carlton County—						
Barnum.....	5				5	
Carver County—						
Laketown Township.....	1				1	
Clay County—						
Hawley.....	4				2	2
Cromwell Township.....	1				1	
Hawley Township.....	1				1	
Cottonwood County—						
Windom.....	4				4	
Douglas County—						
Orange Township.....	7				7	
Fillmore County—						
Fillmore Township.....	1				1	
Freeborn County—						
Albert Lea.....	3			1	2	
Albert Lea Township.....	1				1	
Hayward Township.....	1				1	
Goodhue County—						
Cannon Falls.....	5			1	4	
Hennepin County—						
Minneapolis.....	15			1	14	
Isanti County—						
Spencer Brook Township..	3				3	
Wyanett Township.....	6				6	
Jackson County—						
Heron Lake.....	4				4	
Jackson.....	1				1	
Lesueur County—						
Washington Township.....	8				8	
Lyon County—						
Tracy.....	2				2	
Morrison County—						
Little Falls.....	1				1	
Darling Township.....	1				1	
Murray County—						
Shetek Township.....	1				1	
Nobles County—						
Elk Township.....	1				1	

SMALLPOX—Continued.

State Reports for March, 1916—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Minnesota—Continued.						
Olmsted County—						
Rochester.....	1				1	
Farmington Township....	2				2	
Pine County—						
Dosey Township.....	2				2	
Partridge Township.....	1				1	
Ramsey County—						
St. Paul.....	15				15	
Redwood County—						
Lamberton.....	1				1	
Renville County—						
Crooks Township.....	1				1	
Ericson Township.....	2			1	1	
Rice County—						
Erin Township.....	1				1	
St. Louis County—						
Duluth.....	1			1		
Hibbing.....	2			1	1	
Sibley County—						
Grafton Township.....	2				2	
Stearns County—						
Paynesville.....	5			1	4	
St. Cloud.....	1				1	
Collegeville Township....	37			1	36	
Paynesville Township....	7				7	
Steele County—						
Owatonna.....	1				1	
Stevens County—						
Moore Township.....	1				1	
Todd County—						
Long Prairie.....	1				1	
Wadena County—						
Wadena.....	1				1	
Washington County—						
Oakdale Township.....	1				1	
Winona County—						
Winona.....	2				2	
Total.....	181			11	168	2
Ohio:						
Adams County.....	8				5	3
Allen County.....	1				1	
Butler County.....	1				1	
Clinton County.....	3				3	
Columbiana County.....	9				7	2
Coshocton County.....	1				2	1
Cuyahoga County.....	4				2	2
Delancey County.....	5				5	
Erie County.....	7				2	5
Fulton County.....	6					6
Guernsey County.....	8				8	
Highland County.....	3				2	1
Jefferson County.....	1				1	
Lorain County.....	3				1	2
Lucas County.....	55		1		27	27
Mahoning County.....	21			2	7	12
Montgomery County.....	1					1
Ottawa County.....	4				2	2
Putnam County.....	1			1		
Ross County.....	16				11	5
Sandusky County.....	1				1	
Seneca County.....	5		1	2		2
Stark County.....	1					1
Tuscarawas County.....	9				1	8
Williams County.....	8				8	
Wood County.....	19				11	8
Total.....	291		2	5	196	88

SMALLPOX—Continued.

State Reports for March, 1916—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Wisconsin:						
Ashland County.....	4					4
Brown County.....	13					13
Dodge County.....	1					1
Door County.....	1		1			
Fond du Lac County.....	3		1		1	1
Langlade County.....	4		1		4	
Manitowish County.....	11	1			11	
Marathon County.....	2		1		1	
Milwaukee County.....	2					2
Pierce County.....	1				1	
Portage County.....	14		2	1	9	2
Rusk County.....	1			1		
St. Croix County.....	3			1		2
Shawano County.....	19				10	9
Sheboygan County.....	17			1	16	
Waupaca County.....	9			1	5	3
Winnebago County.....	11			2	9	
Total.....	116	1	5	7	67	37

Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Arkansas (Feb. 1-29):			Illinois (Feb. 1-29)—Contd.		
Counties—			Counties—Continued.		
Calhoun.....	3		Macoupin.....	43	
Carroll.....	3		Madison.....	8	
Hempstead.....	1		Marion.....	13	
Howard.....	7		McHenry.....	4	
Jackson.....	21		McLean.....	1	
Jefferson.....	35		Menard.....	14	
Lafayette.....	7		Merger.....	2	
Lawrence.....	28		Montgomery.....	1	
Logan.....	38		Morgan.....	3	
Newton.....	32		Peoria.....	51	
Phillips.....	11		Pike.....	6	
Polk.....	28		Rock Island.....	7	
St. Francis.....	5		Saline.....	1	
Stone.....	6		Sangamon.....	64	
Union.....	2		Shelby.....	1	
White.....	12		Stark.....	1	
Total.....	239		Tazewell.....	4	
Illinois (Feb. 1-29):			Vermilion.....	1	
Counties—			Wabash.....	9	
Adams.....	1		Warren.....	1	
Bureau.....	3		Whiteside.....	3	
Champaign.....	3		Woodford.....	26	
Christian.....	5		Total.....	394	
Clark.....	1		Louisiana (Mar. 1-31):		
Coles.....	3		Parishes—		
Cook.....	14		Acadia.....	13	
Crawford.....	1		Allen.....	1	
DeKalb.....	3		Assumption.....	1	
Edwards.....	16		Beauregard.....	5	
Fayette.....	24		Bossier.....	1	
Hancock.....	6		Caddo.....	5	
Henderson.....	2		Calcasieu.....	31	
Jackson.....	1		I e Soto.....	1	
Jo Davies.....	1		Franklin.....	12	
Kane.....	3		Iberia.....	1	
Kankakee.....	2		Iberville.....	2	
Knox.....	7		Jefferson Davis.....	2	
La Salle.....	1		Lafayette.....	41	
Livingston.....	6		Rapides.....	2	
Macon.....	27		Richland.....	1	

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Louisiana (Mar. 1-31)—Contd.			Vermont (Mar. 1-31):		
Parishes—Contd.			Counties—		
Sabine.....	1	.....	Caledonia.....	1	.....
St. Martin.....	7	.....	Essex.....	7	.....
St. Tammany.....	1	.....	Orleans.....	5	.....
Vermilion.....	2	.....	Total.....	13	.....
West Feliciana.....	2	.....		
Total.....	132	.....	Virginia (Mar. 1-31):		
Massachusetts (Mar. 1-31):			Counties—		
Worcester County—			Floyd.....	14	.....
Fitchburg.....	3	.....	Montgomery.....	5	.....
South Carolina (Mar. 1-31):			Norfolk.....	1	.....
Counties—			Northampton.....	6	.....
Charleston.....	1	.....	Nottoway.....	2	.....
Horry.....	1	.....	Page.....	7	.....
Orangeburg.....	2	.....	Roanoke.....	9	.....
Total.....	4	.....	Surry.....	4	.....
			Washington.....	3	.....
			Total.....	51	.....

City Reports for Week Ended Apr. 8, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont.....	2	.....	Los Angeles, Cal.....	5	.....
Charleston, S. C.....	1	.....	Milwaukee, Wis.....	1	.....
Coffeyville, Kans.....	1	.....	New Orleans, La.....	6	.....
Danville, Ill.....	1	.....	Oklahoma, Okla.....	6	.....
Davenport, Iowa.....	6	.....	Omaha, Nebr.....	4	.....
Detroit, Mich.....	20	.....	Portland, Oreg.....	1	.....
Duluth, Minn.....	1	.....	St. Paul, Minn.....	2	.....
El Paso, Tex.....	4	1	Sioux City, Iowa.....	1	.....
Evansville, Ind.....	9	.....	Springfield, Ill.....	15	.....
Fitchburg, Mass.....	3	.....	Superior, Wis.....	1	.....
Galveston, Tex.....	2	.....	Toledo, Ohio.....	3	.....
Lincoln, Nebr.....	1	.....	Wichita, Kans.....	1	.....

TETANUS.

City Reports for Week Ended Apr. 8, 1916.

During the week ended April 8, 1916, tetanus was reported in cities as follows: Baltimore, Md., 1 death; Mobile, Ala., 1 case; Rockford, Ill., 1 death.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1075.

TYPHOID FEVER.

State Reports for March, 1916.

Place.	New cases reported.	Place.	New cases reported.
California:		Maryland—Continued.	
Alameda County—		Charles County—	
Alameda.....	4	Bryantown.....	2
Berkeley.....	2	Dorchester County—	
Oakland.....	3	Fishing Creek.....	2
Butte County.....	1	Frederick County—	
Contra Costa County—		Frederick.....	1
Pittsburg.....	1	Garrett County—	
Humboldt County—		Kitzmillier.....	1
Eureka.....	1	Howard County—	
Kern County.....	1	Sykesville R. F. D.....	1
Bakersfield.....	1	Prince Georges County—	
Los Angeles County—		Laurel.....	1
Burbank.....	1	Washington County—	
Long Beach.....	4	Hagerstown.....	5
Los Angeles.....	8	Hagerstown R. F. D.....	1
Pasadena.....	1	Highfield.....	1
Mendocina County—		Williamsport R. F. D.....	1
Willits.....	2	Downsville.....	1
Riverside County—		Worcester County—	
Riverside.....	1	Pocomoke City.....	1
Sacramento County—		Total.....	70
Sacramento.....	3		
San Bernardino.....	1	Massachusetts:	
Ontario.....	2	Berkshire County—	
San Bernardino.....	1	North Adams Township.....	1
San Diego County—		Bristol County—	
National City.....	1	Eastern Township.....	1
San Diego.....	8	Fall River.....	4
San Francisco.....	12	Essex County—	
San Joaquin County—		Beverly.....	2
Stockton.....	3	Haverhill.....	2
San Luis Obispo County.....	1	Lawrence.....	2
Santa Barbara County—		Lynn.....	2
Santa Barbara.....	2	Methuen Township.....	1
Solano County—		Rowley Township.....	1
Rio Vista.....	2	Saugus Township.....	1
Stanislaus County.....	1	Hampden County—	
Total.....	68	Chicopee.....	1
District of Columbia.....		Palmer Township.....	1
	13	Middlesex County—	
Louisiana:		Lowell.....	4
Acadia Parish.....	4	Malden.....	1
Bossier Parish.....	2	Marlborough.....	2
Calcasieu Parish.....	4	Newton.....	2
East Baton Rouge Parish.....	1	Somerville.....	2
East Feliciana Parish.....	2	Watertown Township.....	2
Lafayette Parish.....	2	Woburn.....	1
Pointe Coupee Parish.....	1	Nantucket County—	
Richland Parish.....	1	Nantucket Township.....	1
St. James Parish.....	4	Norfolk County—	
St. Landry Parish.....	1	Dedham Township.....	1
St. Mary Parish.....	1	Plymouth County—	
Tensas Parish.....	1	Brockton.....	3
Union Parish.....	1	Hanson Township.....	1
Vermilion Parish.....	1	Whitman Township.....	1
Total.....	26	Suffolk County—	
Maryland:		Boston.....	10
Baltimore City.....	24	Chelsea.....	2
Allegany County—		Worcester County—	
Western Maryland Hospital.....	1	Dudley Township.....	1
Cumberland.....	3	Leominster Township.....	1
Westernport.....	10	Total.....	54
Eckhart.....	1		
Luke.....	2	Michigan:	
Baltimore County—		Alpena County—	
Arlington.....	3	Alpena.....	1
Highlandtown.....	3	Bay County—	
Violetville.....	2	Bay City.....	1
Howard Park.....	1	Berrien County—	
Calvert County—		Watervliet.....	1
Broomes Island.....	1	Calhoun County—	
Cecil County—		Battle Creek.....	1
Rising Sun.....	1	Cass County—	
		Howard Township.....	1
		Jefferson Township.....	1

TYPHOID FEVER—Continued.

State Reports for March, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
Michigan—Continued.		Minnesota—Continued.	
Charlevoix County—		Dakota County—	
Boyer City.....	1	Hastings.....	1
Crawford County—		Freeborn County—	
Grayling.....	1	Glenville.....	1
Delta County—		Albert Lea Township.....	1
Maple Ridge Township.....	1	Goodhue County—	
Escanaba.....	4	Florence Township.....	1
Eaton County—		Hennepin County—	
Grand Ledge.....	1	Minneapolis.....	17
Genesee County—		Kittson County—	
Flint.....	12	Hallock.....	1
Huron County—		Lac qui Parle County—	
Caseville.....	1	Camp Release Township.....	1
Ingham County—		Lake County—	
Lansing.....	1	Two Harbors.....	1
Iosco County—		Lesueur County—	
East Tawas.....	2	Le Sueur Center.....	1
Isabella County—		Marshall County—	
Coldwater Township.....	1	Comstock Township.....	1
Jackson County—		Nobles County—	
Jackson.....	1	Olney Township.....	1
Kalamazoo County—		Olmsted County—	
Kalamazoo.....	1	Rochester.....	1
Kent County—		Marion Township.....	1
Grand Rapids.....	14	Pleasant Grove Township.....	2
Lapeer County—		Pennington County—	
Deerfield Township.....	1	Thief River Falls.....	4
Leelanau County—		Rocksbury Township.....	3
Suttons Bay.....	2	Pipestone County—	
Marquette County—		Pipestone.....	1
Marquette.....	2	Polk County—	
Mecosta County—		Crookston.....	2
Big Rapids.....	1	Ramsey County—	
Monroe County—		St. Paul.....	3
Bedford Township.....	2	White Bear.....	1
Ash Township.....	1	Rice County—	
Monroe.....	1	Faribault.....	1
Muskegon County—		St. Louis County—	
Muskegon.....	1	Duluth.....	4
Ogemaw County—		Eveleth.....	3
Churchill Township.....	2	Virginia.....	3
Ontonagon County—		Stearns County—	
Ontonagon.....	4	Richmond.....	1
Ottawa County—		Wabasha County—	
Grand Haven.....	1	Wabasha.....	1
Saginaw County—		Total.....	65
Chapin Township.....	1	New Jersey:	
Taymouth Township.....	2	Atlantic County.....	3
St. Charles.....	1	Bergen County.....	1
Saginaw.....	7	Burlington County.....	1
St. Clair County—		Camden County.....	17
Wales Township.....	1	Cape May County.....	1
Marine City.....	1	Essex County.....	10
Shiawassee County—		Hudson County.....	4
Rush Township.....	1	Hunterdon County.....	1
Vernon.....	1	Mercer County.....	4
Van Buren County—		Middlesex County.....	2
Bloomington Township.....	1	Monmouth County.....	2
Washtenaw County—		Ocean County.....	1
Ann Arbor.....	7	Passaic County.....	4
Wayne County—		Salem County.....	1
Monguagon Township.....	1	Union County.....	9
Detroit.....	10	Total.....	61
Total.....	99	Ohio:	
Minnesota:		Adams County.....	3
Anoka County—		Ashtabula County—	
Columbia Heights.....	1	Ashtabula.....	2
Beltrami County—		Conneaut.....	3
Kelliher.....	1	Athens County.....	1
Blue Earth County—		Belmont County.....	3
Mankato.....	1	Carroll County.....	4
Brown County—		Clark County.....	2
New Ulm.....	3	Clinton County.....	1
Chisago County—		Columbiana County.....	5
Wyoming.....	1		

TYPHOID FEVER—Continued.
State Reports for March, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
Ohio—Continued.		Virginia:	
Coshocton County.....	1	Albemarle County.....	1
Cuyahoga County.....	12	Alleghany County.....	1
Deaance County.....	3	Amelia County.....	1
Erie County.....	3	Appomattox County.....	2
Franklin County.....	3	Botetourt County.....	1
Guernsey County.....	6	Campbell County.....	
Hamilton County.....	5	Lynchburg.....	1
Jackson County.....	1	Charlotte County.....	1
Jefferson County.....	4	Chesterfield County.....	2
Knox County.....	1	Culpeper County.....	1
Lake County.....	1	Elizabeth City County.....	1
Lawrence County.....	17	Fluvanna County.....	1
Logan County.....	2	Franklin County.....	2
Lorain County.....		Gloucester County.....	1
Elyria.....	1	Goochland County.....	2
Lucas County.....		Halifax County.....	11
Toledo.....	10	Lancaster County.....	2
Mahoning County.....	16	Mecklenburg County.....	1
Marion County.....	2	Montgomery County.....	3
Medina County.....	1	Norfolk County.....	2
Miami County.....	2	Northampton County.....	1
Montgomery County.....		Pittsylvania County.....	1
Dayton.....	2	Powhatan County.....	1
Morrow County.....	1	Pulaski County.....	1
Muskingum County.....	31	Richmond County.....	1
Noble County.....	1	Roanoke County.....	2
Ottawa County.....	1	Russell County.....	4
Perry County.....	1	Rockingham County.....	1
Portage County.....		Shenandoah County.....	1
Ravenna.....	1	Smyth County.....	1
Richland County.....		Southampton County.....	2
Mansfield.....	1	Surry County.....	1
Ross County.....	2	Tazewell County.....	8
Sandusky County.....		West Moreland County.....	1
Fremont.....	14	Wythe County.....	1
Seloto County.....	1	York County.....	1
Seneca County.....	1		
Shelby County.....	2	Total.....	65
Stark County.....			
Alliance.....	1	Wisconsin:	
Canton.....	1	Columbia County.....	1
Massillon.....	2	Door County.....	1
Trumbull County.....	7	Fond du Lac County.....	1
Wayne County.....	1	Iron County.....	1
Total.....	165	Kenosha County.....	2
South Carolina:		La Crosse County.....	2
Charleston County.....	10	Lincoln County.....	1
Orangeburg County.....	1	Marathon County.....	1
Pickens County.....	1	Milwaukee County.....	224
Richland County.....	5	Oconto County.....	3
Sumter County.....	1	Racine County.....	1
Total.....	18	Sauk County.....	1
Vermont:		Sheboygan County.....	8
Addison County.....	3	Vernon County.....	2
Chittenden County.....	1	Total.....	253
Franklin County.....	1		
Total.....	5		

Arkansas Report for February, 1916.

Place.	New cases reported.	Place.	New cases reported.
Arkansas:		Arkansas—Continued.	
Carroll County.....	4	Pope County.....	3
Columbia County.....	1	Pulaski County.....	3
Greene County.....	2	Union County.....	3
Howard County.....	5	Washington County.....	2
Jackson County.....	1	Total.....	26
Newton County.....	1		
Phillips County.....	1		

TYPHOID FEVER—Continued.

City Reports for Week Ended Apr. 8, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.	2	1	Marinette, Wis.	1	
Beaver Falls, Pa.	2		Milwaukee, Wis.	14	1
Berkeley, Cal.		1	Montclair, N. J.	1	
Binghamton, N. Y.	1		New Bedford, Mass.	1	1
Birmingham, Ala.	3		New Castle, Pa.	3	
Boston, Mass.	3		New Orleans, La.		
Bridgeport, Conn.	1	1	New York, N. Y.	20	2
Brockton, Mass.	1		Niagara Falls, N. Y.	1	1
Buffalo, N. Y.	1	1	Norristown, Pa.	1	
Charleston, S. C.	1		North Adams, Mass.	1	
Chicago, Ill.	20	3	Philadelphia, Pa.	8	2
Cincinnati, Ohio.	3		Pittsburgh, Pa.	1	
Cleveland, Ohio.	4		Portland, Oreg.	2	1
Danville, Ill.	1		Portsmouth, Va.	1	
Detroit, Mich.		1	Providence, R. I.	4	
Duluth, Minn.	2		Reading, Pa.	4	1
Galesburg, Ill.	3		Roanoke, Va.	4	
Galveston, Tex.	1	1	Rochester, N. Y.	1	
Grand Rapids, Mich.	4		Rockford, Ill.	1	
Harrisburg, Pa.	2		Saginaw, Mich.	2	
Hartford, Conn.		1	St. Louis, Mo.	1	
Hoboken, N. J.	1		Salt Lake City, Utah.	1	
Kansas City, Mo.	1		San Francisco, Cal.	5	1
Kearny, N. J.	1		Tacoma, Wash.	2	
Kokomo, Ind.	1		Toledo, Ohio.	7	
Lancaster, Pa.	3		Trenton, N. J.	1	
Lawrence, Mass.	3		Troy, N. Y.	1	
Lincoln, Nebr.	1		Washington, D. C.	2	
Los Angeles, Cal.	1	1	Wilmington, Del.	2	
Malden, Mass.	1		Worcester, N. Y.	1	

TYPHUS FEVER.

New Mexico—Malpais.

Senior Surg. Pierce reported the occurrence of a case of typhus fever at Malpais, N. Mex., the patient having been taken to El Paso, Tex., April 20, 1916.

City Reports for Week Ended Apr. 8, 1916.

During the week ended April 8, 1916, typhus fever was reported in cities as follows: El Paso, Tex., 2 cases, 2 deaths; New York, N. Y., 1 case.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for March, 1916.

Place.	Cases reported.			Place.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
California	385	760	419	New Jersey	506		625
District of Columbia	31	332	70	Ohio	594	11,479	1,167
Louisiana	15	69	6	South Carolina	39	24	12
Maryland	153	2,772	301	Vermont	15	71	54
Massachusetts	685	3,302	905	Virginia	129	3,858	55
Michigan	339	1,708	795	Wisconsin	144	3,239	512
Minnesota	210	2,845	630				

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

Arkansas Report for February, 1916.

During the month of February, 1916, 16 cases of diphtheria, 34 cases of measles, and 3 cases of scarlet fever were notified in the State of Arkansas.

City Reports for Week Ended Apr. 8, 1916.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	584,605	235	15	—	268	1	34	—	15	25
Boston, Mass.	745,139	243	44	4	126	1	61	—	51	19
Chicago, Ill.	2,447,045	662	88	5	334	3	207	6	170	75
Cleveland, Ohio.	656,975	189	28	1	186	1	31	4	47	16
Detroit, Mich.	554,717	274	44	4	140	14	42	2	41	22
New York, N. Y.	5,468,190	1,674	304	22	932	21	194	4	415	193
Philadelphia, Pa.	1,683,664	561	55	15	497	7	70	1	133	49
Pittsburgh, Pa.	571,984	200	24	4	210	4	10	—	37	11
St. Louis, Mo.	745,988	197	71	3	222	1	35	1	48	25
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	461,335	130	9	1	68	1	13	—	40	14
Cincinnati, Ohio.	406,706	—	14	—	380	3	3	—	52	22
Jersey City, N. J.	300,133	62	18	2	58	1	19	1	21	4
Los Angeles, Cal.	465,367	130	9	—	26	—	5	—	52	19
Milwaukee, Wis.	428,062	110	17	2	268	8	41	—	28	6
Newark, N. J.	399,000	141	24	3	612	9	27	—	68	20
New Orleans, La.	366,484	—	15	—	8	—	3	—	39	18
San Francisco, Cal.	416,912	149	46	7	5	—	31	1	—	14
Washington, D. C.	358,679	143	8	—	116	—	17	—	30	15
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.	209,722	71	5	1	52	—	3	—	7	5
Kansas City, Mo.	289,879	—	5	1	268	1	51	2	2	12
Portland, Oreg.	272,833	53	6	1	20	1	5	—	3	3
Providence, R. I.	250,025	85	13	1	73	5	24	—	1	8
Rochester, N. Y.	250,747	93	1	—	35	—	2	—	7	8
St. Paul, Minn.	241,999	47	2	—	100	—	8	—	17	4
From 100,000 to 200,000 inhabitants:										
Atlanta, Ga.	184,873	49	1	—	—	—	1	—	—	9
Birmingham, Ala.	174,108	42	1	—	1	—	1	—	4	4
Bridgeport, Conn.	118,434	45	5	1	3	—	4	—	4	2
Cambridge, Mass.	111,669	20	8	—	7	—	7	—	3	3
Camden, N. J.	104,549	—	4	—	2	—	5	—	7	—
Fall River, Mass.	126,904	32	8	—	13	—	6	—	9	1
Grand Rapids, Mich.	125,759	48	1	—	20	—	21	—	9	3
Hartford, Conn.	108,969	49	7	2	123	4	2	—	2	1
Lowell, Mass.	112,124	36	1	—	8	—	—	—	3	6
Lynn, Mass.	100,316	25	—	—	—	—	1	—	—	1
Nashville, Tenn.	115,978	43	—	—	—	—	1	—	10	7
New Bedford, Mass.	114,694	31	—	—	7	—	4	—	14	1
New Haven, Conn.	147,095	—	—	—	4	—	11	—	9	5
Oakland, Cal.	190,803	—	3	—	2	—	8	—	5	6
Omaha, Nebr.	135,455	—	1	—	4	—	25	1	7	4
Reading, Pa.	105,094	32	—	—	17	—	13	—	1	2
Richmond, Va.	154,674	51	—	—	674	1	3	—	6	6
Salt Lake City, Utah.	113,567	21	7	1	3	—	2	—	1	1
Springfield, Mass.	103,216	34	4	1	65	—	10	—	2	1
Syracuse, N. Y.	152,534	34	1	—	1	—	3	—	6	1
Tacoma, Wash.	108,094	—	—	—	1	—	—	—	—	—
Toledo, Ohio.	187,840	66	2	1	312	7	12	—	13	6
Trenton, N. J.	109,212	36	5	—	6	—	6	—	3	2
Worcester, Mass.	160,523	61	3	—	33	2	5	—	5	7
From 50,000 to 100,000 inhabitants:										
Akron, Ohio.	82,958	43	3	1	34	2	10	—	1	—
Allentown, Pa.	61,901	17	9	—	9	—	1	—	1	—
Atlantic City, N. J.	55,806	10	4	—	3	—	3	—	16	—
Bayonne, N. J.	67,582	16	1	—	7	—	3	—	4	—

*Population Apr. 15, 1910; no estimate made.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 8, 1916—Continued.

City.	Population as of July 1, 1915 (esti- mated by U. S. Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabit- ants—Continued.										
Berkeley, Cal.	54,879	11	1		1		3		2	
Binghamton, N. Y.	53,082	26	12	1	32		1		3	
Brockton, Mass.	65,746	24	6		251		4		3	3
Canton, Ohio	59,139	10	2		5		6		2	
Charleston, S. C.	60,427	14	1		15	1	1		1	2
Covington, Ky.	56,520	18	3		51				3	1
Duluth, Minn.	91,913	17			80	1	9		4	3
El Paso, Tex.	51,936	36			7				6	6
Evansville, Ind.	72,125	13	1						1	2
Fort Wayne, Ind.	74,352	18	1				1		2	
Harrisburg, Pa.	70,754	4	1		319				12	
Hoboken, N. J.	76,104	22	6	1	27		5		10	2
Johnstown, Pa.	66,585	33	5	1	65				3	2
Lancaster, Pa.	50,269	5			34		2		1	
Lawrence, Mass.	98,197	32	7	1	19	1	6		6	6
Little Rock, Ark.	55,158	10			1					
Malden, Mass.	50,667	12	5	1	7		5		1	
Manchester, N. H.	76,959	24	2		78		3			
Mobile, Ala.	56,506	14							2	2
New Britain, Conn.	52,203		1		113		1		1	1
Norfolk, Va.	88,076				20				6	6
Oklahoma, Okla.	88,158	15	2		4		3		5	5
Passaic, N. J.	69,010	20	3		13				2	4
Pawtucket, R. I.	58,156	12			1		1		1	1
Rockford, Ill.	53,761		2		25		6		1	1
Sacramento, Cal.	64,806	23					1		1	3
Saginaw, Mich.	54,815	18	1		85				37	
San Diego, Cal.	51,115	25	3		77				4	4
Schenectady, N. Y.	95,265	22	2		8		7		5	
Sioux City, Iowa.	55,588		3				1			
Somerville, Mass.	85,460	23	4				5		4	2
South Bend, Ind.	67,030	19	1		76		4			3
Springfield, Ill.	59,468		5	1	26		2		4	4
Springfield, Ohio.	50,804	13	3		92		4	1	1	2
Troy, N. Y.	77,738		3		3		7		4	6
Wichita, Kans.	67,847				8		2		2	
Wilkes-Barre, Pa.	75,218	25	1		4		2		5	2
Wilmington, Del.	93,161	10	3		82	1	1			
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,031	4					2		1	
Brookline, Mass.	31,934	7			5		2		1	1
Butte, Mont.	42,918	25			115				4	1
Chelsea, Mass.	*32,452	16	1		5				5	3
Chicopee, Mass.	28,688	9			13		1	1	5	
Danville, Ill.	31,554	16			117	2	1			
Davenport, Iowa.	47,127		2				3			
East Orange, N. J.	41,155	7	3		19		1		6	
Elgin, Ill.	27,844	11								
Everett, Mass.	38,307		4	1	1		3		2	1
Everett, Wash.	33,767	5			6					1
Fitchburgh, Mass.	41,144	6	1		35		3		1	1
Galveston, Tex.	41,076	10	2							
Haverhill, Mass.	47,774	12	5		4		1		4	3
Kalamazoo, Mich.	47,364	19	4		1				6	
Kenosha, Wis.	30,319	10	2	1	6		2			
La Crosse, Wis.	31,522		5	1	10				1	
Lexington, Ky.	39,703	20			5		3			
Lima, Ohio.	34,614	10			119		1			1
Lincoln, Nebr.	46,028	13	1		1		1			
Lorain, Ohio.	35,662		1		21		2			
Lynchburg, Va.	32,385	19			173				1	
Madison, Wis.	30,081				4		2			1
Medford, Mass.	25,737	9	1				3			
Montclair, N. J.	25,550	5	1		15		1		1	
New Castle, Pa.	40,351				13		1		4	
Newport, Ky.	31,722	6							1	1
Newport, R. I.	29,631	9	1		19					1

* Population Apr. 15, 1910; no estimate made.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 8, 1916—Continued.

City.	Population as of July 1, 1915 (esti- mated by U. S. Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabit- ants—Continued.										
Newton, Mass.	43,085	7	1	—	13	—	2	—	1	1
Niagara Falls, N. Y.	36,240	19	2	—	132	1	—	—	3	—
Norristown, Pa.	30,833	8	1	—	70	—	—	—	—	1
Orange, N. J.	32,524	16	2	—	75	1	1	—	3	1
Pasadena, Cal.	43,859	8	1	—	—	—	—	—	1	2
Perth Amboy, N. J.	39,725	—	1	—	—	—	1	—	2	—
Pittsfield, Mass.	37,580	11	2	1	1	—	—	—	—	1
Portsmouth, Va.	38,610	10	—	—	2	—	—	—	1	1
Racine, Wis.	45,507	—	2	—	18	—	4	—	1	3
Roanoke, Va.	41,929	12	1	—	8	—	—	—	2	1
San Jose, Cal.	37,994	7	—	—	—	—	1	—	1	—
Steubenville, Ohio.	29,631	4	—	—	41	—	—	—	—	1
Stockton, Cal.	34,508	12	—	—	—	—	—	—	—	1
Superior, Wis.	45,285	9	2	—	4	—	—	—	2	2
Taunton, Mass.	35,957	17	—	—	—	—	—	—	—	1
Waltham, Mass.	30,129	3	1	—	—	—	3	—	—	—
West Hoboken, N. J.	41,893	3	—	—	1	—	1	—	12	—
Wheeling, W. Va.	43,097	—	—	—	—	—	99	—	—	—
Williamsport, Pa.	33,495	10	—	—	3	—	1	—	—	—
Wilmington, N. C.	28,264	9	1	—	—	—	1	—	—	1
Zanesville, Ohio.	30,406	—	—	—	26	1	—	—	—	—
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich.	14,979	10	1	—	1	—	—	—	2	1
Beaver Falls, Pa.	13,316	—	1	—	—	—	—	—	—	—
Biddeford, Me.	17,570	12	—	—	—	—	—	—	—	2
Cairo, Ill.	15,593	4	—	—	—	—	—	—	—	2
Clinton, Mass.	*13,075	6	—	—	—	—	—	—	1	—
Concord, N. H.	22,480	10	—	—	4	—	—	—	—	1
Galesburg, Ill.	23,923	8	—	—	—	—	—	—	—	—
Gardner, Mass.	16,746	5	—	—	—	—	1	—	2	—
Harrison, N. J.	16,555	—	—	—	4	—	—	—	—	—
Kearny, N. J.	22,753	7	—	—	25	—	—	—	—	2
Kokomo, Ind.	20,312	3	—	—	1	—	—	—	1	1
Long Branch, N. J.	15,057	4	—	—	—	—	—	—	—	—
Marinette, Wis.	*14,610	—	—	—	1	—	—	—	—	—
Melrose, Mass.	17,166	5	—	—	—	—	—	—	—	—
Morristown, N. J.	13,158	5	—	—	75	—	2	—	1	—
Muscatine, Iowa	17,287	2	—	—	—	—	—	—	—	—
Nanticoke, Pa.	22,441	5	—	—	—	—	—	—	—	—
Newburyport, Mass.	15,195	3	3	—	—	—	—	—	—	1
New London, Conn.	20,771	10	—	—	—	—	—	—	—	—
North Adams, Mass.	*22,019	3	—	—	—	—	2	—	—	—
Northampton, Mass.	19,846	13	—	—	4	—	4	—	1	—
Plainfield, N. J.	23,280	7	—	—	11	—	3	—	4	—
Rutland, Vt.	14,624	6	—	—	—	—	—	—	—	—
Saratoga Springs, N. Y.	12,842	3	—	—	1	—	—	—	—	—
Steelton, Pa.	15,337	3	—	—	44	—	—	—	3	1
Wilkinsburg, Pa.	22,361	10	—	—	22	—	2	—	1	—
Woburn, Mass.	15,862	9	—	—	—	—	—	—	—	—

*Population Apr. 15, 1910; no estimate made.

FOREIGN.

CHINA.

Examination of Rats—Plague Rat Found—Hongkong.

During the week ended February 26, 1916, out of 2,177 rats examined at Hongkong, 1 was found plague infected.

CUBA.

Communicable Diseases—Habana.

Communicable diseases were notified at Habana during the 10-day period ended April 10, 1916, as follows:

Disease.	New cases.	Deaths.	Remain- ing under treat- ment Apr. 10, 1916.
Cerebrospinal meningitis.....	1	2	9
Diphtheria.....	16	2	244
Leprosy.....			1
Malaria.....			7
Measles.....	6		2
Paratyphoid fever.....			5
Scarlet fever.....	3		25
Typhoid fever.....	8	1	11
Varicella.....	18		

GREAT BRITAIN.

Examination of Rats—Liverpool.

During the two weeks ended March 18, 1916, 523 rats were examined at Liverpool. No plague infection was found.

MEXICO.

Yellow Fever—Frontera.

A fatal case of yellow fever was notified at Frontera, Mexico, April 22, 1916.

TURKEY.

Epidemic Typhus Fever—Damascus.

During the month of February, 1916, typhus fever was reported present in epidemic form among troops at Damascus, with an estimated number of 1,000 cases with 150 deaths.

Dysentery—Relapsing Fever—Damascus.

During the month of February, 1916, dysentery and relapsing fever were reported prevalent at Damascus.

Quarantine Against Island of Syra Suspended.

The quarantine measures put in force at Turkish ports, January 15, 1916, against arrivals from the island of Syra, Greece, were discontinued March 6, 1916.

ZANZIBAR.**Examination of Rats—Zanzibar.**

Rats have been examined at Zanzibar for plague infection as follows: Month of January, 1916, 4,522 rats; month of February, 1916, 4,576 rats. No plague infection was found.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.**Reports Received During Week Ended Apr. 28, 1916.¹****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks
Austria-Hungary:				
Austria.....				Jan. 3-Feb. 5, 1916: Cases, 138; deaths, 47.
India:				
Calcutta.....	Feb. 20-26.....		13	
Madras.....	do.....	6	4	
Rangoon.....	do.....	1	2	
Persia:				
Enzeli.....	Mar. 2.....	1	1	

PLAGUE.

Ceylon:				
Colombo.....	Feb. 20-Mar. 4....	7	7	
Egypt:				Jan. 1-Mar. 16, 1916: Cases, 225; deaths, 103.
Assiout province.....	Mar. 10-14.....	44	10	
Fayoum province.....	Mar. 10-16.....	43	24	
Girgeh province.....	Mar. 13-15.....	4		
Minieh province.....	Mar. 14-15.....	2		
India:				Feb. 20-26, 1916: Cases, 9,211; deaths, 7,505.
Bombay.....	Feb. 27-Mar. 4....	83	65	
Calcutta.....	Feb. 20-26.....		1	
Madras Presidency.....	Feb. 20-Mar. 4....	743	505	
Rangoon.....	Feb. 20-26.....	87	86	
Java:				Jan. 1-14, 1916: Cases, 320; deaths 300. Jan. 15-28, 1916: Cases, 171; deaths, 169.
Kediri residency.....	Jan. 1-14.....	82	78	
Do.....	Jan. 15-28.....	37	38	
Madjoen residency.....	do.....	6	5	
Paseroean residency.....	Jan. 1-14.....	11	11	
Do.....	Jan. 15-28.....	13	12	
Surabaya residency.....	Jan. 1-14.....	16	15	
Do.....	Jan. 15-28.....	15	16	
Surakarta residency.....	Jan. 1-14.....	201	196	
Do.....	Jan. 15-28.....	100	98	
Straits Settlements:				
Singapore.....	Feb. 20-26.....	1	1	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received During Week Ended Apr. 28, 1916—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....				Jan. 23-Feb. 12, 1916: Cases, 1,815.
Vienna.....	Feb. 27-Mar. 18...	51	10	
Hungary—				
Budapest.....	Feb. 27-Mar. 4....	28	3	
Brazil:				
Rio de Janeiro.....	Feb. 13-Mar. 11...	49	8	
British East Africa:				
Mombasa.....	Jan. 1-31.....		1	
Ceylon:				
Colombo.....	Feb. 20-26.....	1		From the port.
Egypt:				
Alexandria.....	Mar. 5-11.....	1		
Great Britain:				
Liverpool.....	Mar. 19-25.....	4		From a vessel.
South Shields.....	Mar. 5-25.....	2		
India:				
Bombay.....	Feb. 27-Mar. 4....	141	63	
Calcutta.....	Feb. 20-26.....		6	
Karachi.....	Feb. 20-Mar. 4....	2	1	
Madras.....	Feb. 20-Mar. 4....	166	52	Epidemic.
Rangoon.....	Feb. 20-26.....	79	16	
Java.....				Jan. 18-Feb. 1, 1916: Cases, 130;
Batavia.....	Jan. 26-Feb. 1....	6	3	deaths, 27.
Mexico:				
Aguascalientes.....	Apr. 3-9.....		18	
Guadalajara.....	Apr. 2-8.....	20	5	
Mazatlan.....	Mar. 29-Apr. 4....		5	
Monterey.....	Apr. 3-9.....	3		
Piedras Negras.....	Apr. 2-8.....		2	
Tampico.....	Mar. 22-31.....		13	
Vera Cruz.....	Mar. 27-Apr. 9....	10	5	
Netherlands:				
Amsterdam.....	Mar. 12-18.....	3		
Russia:				
Petrograd.....	Feb. 6-26.....	86	30	
Spain:				
Seville.....	Feb. 1-29.....		4	
Valencia.....	Mar. 12-25.....	25	2	
Straits Settlements:				
Penang.....	Jan. 30-Feb. 5....	2		
Singapore.....	Feb. 13-Mar. 4....	17	3	
Switzerland:				
Basel.....	Mar. 5-11.....	15		

TYPHUS FEVER.

Algeria:				
Algiers.....	Feb. 1-29.....	1	1	
Austria-Hungary:				
Austria.....	Jan. 16-Feb. 12...	1,345		
Egypt:				
Alexandria.....	Feb. 27-Mar. 18...	64	11	
Germany:				
Barmen.....	Jan. 2-8.....	2		
Berlin.....	Feb. 26-Mar. 11...		6	
Chemnitz.....	Jan. 23-29.....		1	
Hanover.....	Mar. 21-27.....		1	
Königsberg.....	Mar. 5-25.....	3		
Greece:				
Saloniki.....	Feb. 14-27.....		5	
Java.....				Jan. 14-Feb. 1, 1916: Cases, 17;
Batavia.....	Jan. 26-Feb. 1....	6	3	deaths, 4.
Mexico:				
Aguascalientes.....	Apr. 3-9.....		1	
Guadalajara.....	Apr. 2-8.....	18	5	
Tampico.....	Mar. 22-31.....		4	
Vera Cruz.....	Apr. 3-9.....		2	
Russia:				
Moscow.....	Feb. 20-Mar. 4....	302	29	
Petrograd.....	Feb. 6-26.....	24	5	
Turkey in Asia:				
Bagdad district.....	Feb. 23.....			Prevalent.
Damascus.....	Feb. 1-29.....	1,100	150	Estimated; among troops.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received During Week Ended Apr. 28, 1916—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico: Frontera.....	Apr. 22.....		1	

Reports Received from Jan. 1 to Apr. 21, 1916.

CHOLERA.

Austria-Hungary.....				Total, Oct. 25, 1915-Jan. 2, 1916: Cases, 412; deaths, 165.
Austria.....	Nov. 7-Dec. 18.....	209	66	
Do.....	Jan. 1-Feb. 12.....	144	49	
Bosnia-Herzegovina.....	Dec. 23-Jan. 3.....	8	6	
Do.....	Jan. 9-Feb. 12.....	12	6	
Croatia-Slavonia.....	Oct. 18-Dec. 20.....	247	105	
Do.....	Jan. 3-31.....	138	126	
Hungary.....	Oct. 18-Jan. 2.....	339	197	
Do.....	Jan. 10-16.....	2	2	Nov. 18-Dec. 10, 1915: Cases, 675; deaths, 276. In a prison camp.
Borneo: Putatan.....	Oct. 17-23.....	2		
India:				
Bassein.....	Nov. 28-Jan. 1.....		29	
Do.....	Jan. 2-Feb. 12.....		17	
Bombay.....	Jan. 16-22.....	1		
Calcutta.....	Oct. 31-Jan. 1.....		139	
Do.....	Jan. 2-Feb. 19.....		89	
Henzada.....	Oct. 7-Nov. 27.....		3	
Madras.....	Nov. 7-Dec. 4.....	5		
Do.....	Jan. 2-Feb. 19.....	23	19	
Madras Presidency.....	Nov. 26.....		12	
Mandalay.....	Oct. 24-Dec. 18.....		46	
Merqui.....	Oct. 23-Jan. 1.....		12	
Do.....	Jan. 2-15.....		21	
Myingyan.....	Oct. 19-Dec. 25.....		15	
Pakkoku.....	Oct. 10-Nov. 6.....		45	
Pegu.....	Jan. 16-Feb. 5.....		3	
Prome.....	Nov. 14-Jan. 1.....		106	
Rangoon.....	Oct. 31-Jan. 1.....	88	69	
Do.....	Jan. 2-Feb. 19.....	52	37	
Tavoy.....	Dec. 5-Jan. 1.....		18	
Do.....	Jan. 2-Feb. 5.....		11	
Toungoo.....	Oct. 7-Dec. 11.....		47	
Yenangyang.....	Nov. 2.....	1	1	American. Sept. 1-30, 1915: Cases, 813; deaths, 549.
Indo-China.....				
	1915.			
Anam Province.....	Sept. 1-30.....	127	92	
Cambodia Province.....	do.....	1	1	
Cochin China Province.....	do.....	15	8	
Saigon.....	Oct. 25-Nov. 28.....	4	3	
Do.....	Jan. 3-23.....	3	1	
Tonkin Province.....	Sept. 1-30.....	670	448	
Java:				
Batavia.....	Oct. 26-Dec. 27.....	55	36	Oct. 15-Nov. 15, 1915: Cases, 69; deaths, 48. Nov. 12-Dec. 6, 1915: Cases, 17; deaths, 10.
Do.....	Jan. 11-17.....	2	1	
Brebes.....	Oct. 15-Dec. 9.....	10	10	
Cheribon.....	Dec. 28-Jan. 3.....	1		Vicinity of Batavia.
Persia:				
Enzeli.....	Nov. 6-12.....		10	Nov. 22, 1915: Still present.
Do.....	Feb. 6.....		7	Present.
Essaleme.....	Nov. 28.....		10	
Gazian.....	Nov. 6-12.....		4	
Karkhan-Roud.....	Nov. 28.....		38	And in vicinity.
Kazvin.....	Nov. 27.....		10	
Resht.....	Nov. 24.....			And vicinity: Present.
Do.....	Feb. 6.....			Present.
Philippine Islands:				
Manila.....	Dec. 26-Jan. 1.....	1	1	
Do.....	Jan. 2-Mar. 4.....	25	12	
Russia:				
Moscow.....	Nov. 14-27.....	4	1	
Siam:				
Bangkok.....	Jan. 9-Feb. 19.....	2	3	
Turkey in Asia:				
Trebizond.....	Dec. 2-4.....	15	10	Dec. 1-31, 1915: Present.
Do.....	Jan. 8.....			Present.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Nov. 21-Feb. 19...	18	11	
Ceylon:				
Colombo.....	Oct. 24-Dec. 25...	37	31	
Do.....	Jan. 2-Feb. 19...	29	28	
China:				
Hongkong.....	Nov. 7-Jan. 1....	4	4	
Do.....	Jan. 2-Feb. 26...	3	3	
Ecuador:				
Guayaquil.....	Nov. 1-30.....	1	1	
Egypt:				Jan. 1-Dec. 31, 1915: Cases, 285; deaths, 120. Jan. 1-Mar. 9, 1916: Cases, 133; deaths, 71.
Alexandria.....	Dec. 23-31.....	2		
Assiout Province.....	Dec. 17-31.....	4	2	
Do.....	Jan. 2-Mar. 9....	43	16	
Fayoum Province.....	Jan. 23-Mar. 9....	10	9	
Garbieh Province.....	Dec. 6-28.....	6	4	
Do.....	Jan. 10-Feb. 13...	2	1	
Girgeh Province.....	Feb. 18-Mar. 4....	2	2	
Gizeh Province.....	Dec. 27.....	1	1	
Do.....	Mar. 5.....	1		
Kereh Province.....	Feb. 15-22.....	4	3	
Minieh Province.....	Nov. 27-Dec. 31...	13	9	
Do.....	Jan. 1-Mar. 8....	32	19	
Port Said.....	Aug. 13-Nov. 1....	3	2	
Suez.....	Jan. 10.....	1		On s. s. Syria from Bombay.
Greece:				
Athens.....	Dec. 8-20.....		1	
Piræus.....	Jan. 29.....	7	5	
Syra Island.....	Jan. 16.....	16	10	
India:				Oct. 31, 1915-Jan. 1, 1916: Cases, 40,533; deaths, 34,225. Jan. 2-Feb. 19, 1916: Cases, 44,907; deaths, 35,229.
Akyab.....	Jan. 16-29.....		1	
Bassein.....	Dec. 26-Jan. 1....		3	
Do.....	Jan. 2-Feb. 12....		37	
Bombay.....	Nov. 9-Jan. 1....	53	51	
Do.....	Jan. 2-Feb. 26....	192	152	
Calcutta.....	Nov. 21-27.....		1	
Do.....	Jan. 2-15.....		1	
Henzada.....	Dec. 26-Jan. 1....		1	
Do.....	Jan. 2-Feb. 5....		70	
Karachi.....	Nov. 7-20.....	2	2	
Madras.....	Jan. 2-8.....	1		
Madras Presidency.....	Oct. 16-Nov. 5....		118	Madras Presidency, Aug. 1, 1898, to June 30, 1915: Cases, 141,350; deaths, 109,095.
Do.....	Nov. 12-Jan. 1....	1,839	1,288	
Do.....	Jan. 9-Feb. 19....	3,408	2,375	
Mandalay.....	Oct. 24-Jan. 1....		266	
Do.....	Jan. 2-Feb. 12....		1,001	
Myingyan.....	Jan. 30-Feb. 5....		6	
Pegu.....	Jan. 9-Feb. 12....		21	
Prome.....	do.....		17	
Rangoon.....	Oct. 1-Dec. 18....	68	66	
Do.....	Jan. 2-Feb. 19....	294	271	
Toungoo.....	Jan. 10-Feb. 5....		4	
Indo-China:				Sept. 1-30, 1915: Cases, 72; deaths, 65.
Anam, Province.....	Sept. 1-30.....	9	5	
Cambodia, Province.....	do.....	20	19	
Cochin China, Province.....	do.....	2		
Saigon.....	Oct. 25-Dec. 5....	8	5	
Do.....	Jan. 3-Feb. 27....	41	18	
Tonkin, Province.....	Sept. 1-30.....	41	41	
Java:				Nov. 19-Dec. 30, 1915: Cases, 1,680; deaths, 1,638. Year 1915: Cases, 4,834; deaths, 4,482; among Chinese and natives.
Kediri residency.....	Oct. 22-Dec. 30...	527	507	
Madison residency.....	Oct. 22-Nov. 11...	1	1	
Paseroean residency.....	Oct. 22-Dec. 30...	49	50	
Surabaya residency.....	do.....	24	24	
Surabaya.....	Nov. 5-Dec. 30...	12	12	
Do.....	Jan. 1-14.....	17	16	
Surakarta residency.....	Oct. 22-Dec. 16...	1,085	1,056	
Mauritius:	Oct. 1-Dec. 30...	8		
Peru:				Jan. 1-Dec. 31, 1915: Cases, 455; deaths, 240. In addition, 18 cases, cause of disease unknown.
Ancachs department.....	Jan. 1-Dec. 31...	8	6	
Arequipa department.....	do.....	23	15	
Callao department.....	do.....	39	13	
Lambayeque department.....	do.....	102	38	
Libertad department.....	do.....	123	63	
Lima department.....	do.....	104	63	
Piura department.....	do.....	52	33	
Tumbes Province, Piura.....	do.....	4	9	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Siberia—				
Transbaikal Province..	October, 1914.....	16	13	
Straits Settlements:				
Penang.....	Nov. 28-Dec. 4....	1	1	
Singapore.....	Oct. 31-Dec. 18....	5	2	
Siam:				
Bangkok.....	Nov. 14-20.....		1	
Do.....	Jan. 2-Feb. 12....	52	69	
Union of South Africa:				
Orange Free State.....	Jan. 23-Feb. 20....	32	20	In Hoopstad, Winsburg, and Senekal districts.
At sea.....	Dec. 29, 1915-Jan. 10, 1916.	4		On s. s. Syria from Bombay. Three cases left at Aden; 1 arrived Jan. 10 at Suez.

SMALLPOX.

Algeria:				
Algiers.....	Dec. 1-31.....	1		
Australia:				
New South Wales.....				Nov. 19-Dec. 30, 1915: Cases, 62. Jan. 7-Feb. 24, 1916: Cases, 27. Suburb of Sydney.
Auburn.....	Jan. 21-Feb. 4....	2		
Bera district.....	Dec. 10-16.....	1		
Bulahdelah district.....	Jan. 3-6.....	1		
Chatswood district.....	Feb. 4-10.....	1		Do.
Cundletown.....	Dec. 24-30.....	3		
Do.....	Jan. 7-13.....	2		
Forster district.....	Jan. 21-27.....	1		
Gloucester district.....	Dec. 10-16.....	1		
Kempsey.....	Jan. 7-13.....	1		On s. s. Yuzgilbar from Sydney. Case returned to Sydney.
Newcastle district.....				Nov. 19-Dec. 30, 1915: Cases, 53. Jan. 7-Feb. 24, 1916: Cases, 16.
Wallsend.....	Jan. 3-6.....	1		
Rooty Hill district.....	Dec. 10-16.....	1		
Singleton district.....	Feb. 4-24.....	2		
Sydney.....	Dec. 3-10.....	10		
Do.....	Jan. 3-6.....	1		
Taree district.....	Jan. 7-13.....	2		
Wyang district.....	Jan. 3-6.....	1		
Austria-Hungary:				
Austria.....				Nov. 7-Dec. 4, 1915: Cases, 3,600. Jan. 16-22, 1916: Cases, 2,979.
Prague.....	Jan. 9-15.....	1		
Trieste.....	Feb. 20-26.....	2		
Vienna.....	Dec. 10-Jan. 1....	24	3	
Do.....	Jan. 2-Feb. 26....	57	10	
Hungary—				
Budapest.....	Nov. 21-Dec. 31...	373		In addition, Jan. 1-8, 3 among troops.
Do.....	Jan. 1-Feb. 26....	73	2	
Brazil:				
Rio de Janeiro.....	Nov. 14-Jan. 1....	147	31	
Do.....	Jan. 2-Feb. 12....	42	13	
British East Africa:				
Mombasa.....	Dec. 1-31.....	2	2	
Canada:				
Alberta—				
Calgary.....	Mar. 5-25.....	2		
Manitoba—				
Winnipeg.....	Feb. 19-26.....	1		
Ontario—				
Fort William and Port Arthur.....	Dec. 19-25.....	1		
Do.....	Jan. 16-22.....	2		
Niagara Falls.....	Mar. 19-25.....	1		
Quebec—				
Montreal.....	Dec. 19-25.....	1		
Do.....	Jan. 16-Mar. 18....	4		
Canary Islands:				
Grand Canary.....	Nov. 23.....			
Aruacas.....	Dec. 5-18.....			Epidemic.
Las Palmas.....	Jan. 3-9.....		1	Present.
Ceylon:				
Colombo.....	Oct. 24-Nov. 13....	6	2	
Do.....	Jan. 30-Feb. 5....	1		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Antung.....	Jan. 3-Mar. 5.....	2		
Chungking.....	Feb. 27-Mar. 4.....			Present.
Foochow.....	Nov. 21-27.....			Do.
Do.....	Jan. 2-Mar. 4.....			Do.
Harbin.....	Nov. 15-Dec. 26.....	12		
Do.....	Jan. 3-Feb. 13.....	5		
Hongkong.....	Jan. 23-Mar. 5.....	34	29	
Nanking.....	Nov. 7-Dec. 18.....			Do.
Do.....	Jan. 16-29.....			Do.
Shanghai.....	Feb. 13-26.....	2		
Tientsin.....	Nov. 21-27.....		2	
Do.....	Feb. 28-Mar. 18.....	19	10	
Colombia:				
Sincé.....	Jan. 23.....	9		50 miles from Cartagena.
Cuba:				
Guantanamo.....	Jan. 16.....	1		U. S. naval station. Case, mild varioloid from U. S. S. Louisiana.
Do.....	Jan. 28-Feb. 8.....	1		U. S. naval station. Case, confluent form.
Egypt:				
Alexandria.....	Dec. 21-27.....	3		
Cairo.....	Sept. 3-Dec. 31.....	9	1	
Port Said.....	Dec. 10-16.....	1		
France:				
Marseille.....	Feb. 1-29.....		1	
Paris.....	Dec. 5-11.....	1		
Germany:				Jan. 2-8, 1916: Cases, 2.
Bavaria—				
Munich.....	Dec. 19-25.....	1		
Berlin.....	Feb. 20-26.....	1		
Breslau.....	Dec. 12-18.....	1	1	
Bromberg, Govt. district.....	Jan. 2.....	1		
Düsseldorf.....	Dec. 5-11.....	1		
Gumbinnen, Govt. district.....	Jan. 2-8.....	1		
Hamburg.....	Dec. 25-Jan. 1.....	1		
Lüneburg, Govt. district.....	Feb. 13-19.....	1		
Oppeln, Govt. district.....	Nov. 21-Dec. 25.....	14		Of these, 8 in one institution.
Do.....	Jan. 2-8.....	1		
Saxony.....	Nov. 21-Dec. 25.....	1		
Great Britain:				
Bristol.....	Jan. 30-Feb. 5.....	1		On s. s. from Bombay.
Cardiff.....	Jan. 30-Mar. 11.....	25	1	
Manchester.....	Feb. 20-26.....	1		
Greece:				
Pireus.....	Jan. 31.....			Present in virulent form.
Guatemala:				
Guatemala City.....	Jan. 9-Mar. 19.....			Present.
India:				
Rassein.....	Jan. 30-Feb. 5.....		1	
Bombay.....	Nov. 7-Jan. 1.....	103	67	
Do.....	Jan. 2-Feb. 26.....	477	230	
Calcutta.....	Nov. 7-Jan. 1.....		3	
Do.....	Jan. 9-Feb. 19.....		10	
Karachi.....	Jan. 30-Feb. 22.....	2		
Madras.....	Nov. 7-Jan. 1.....	46	20	
Do.....	Jan. 2-Feb. 19.....	292	88	
Rangoon.....	Oct. 31-Dec. 11.....	14	7	
Do.....	Jan. 2-Feb. 5.....	164	36	
Toungoo.....	Dec. 5-11.....		1	
Italy:				
Turin.....	Nov. 22-Dec. 5.....	6		
Japan:				
Yokohama.....	Jan. 17-Mar. 19.....	12	2	
Java:				Oct. 15-Dec. 30, 1915: Cases, 558; deaths, 118. Jan. 1-17, 1916: Cases, 38; deaths, 9.
Batavia.....	Nov. 1-Jan. 29.....	46	20	
Samarang.....	Nov. 12-22.....	2		
Malta.....	Dec. 1-31.....	1		
Manchuria:				
Harbin.....	Nov. 15-28.....	5		See China.
Mexico:				
Agua Calientes.....	Dec. 13-Mar. 26.....		206	
Chihuahua.....	Jan. 3-9.....	1	1	
Frontera.....	Nov. 21-Dec. 25.....	86	21	Dec. 26-31, 1915: Present.
Do.....	Jan. 1-Mar. 25.....		13	Present Jan. 1-Feb. 10, 1916; estimated number of cases, 70.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico—Continued.				
Guadalajara.....	Dec. 5-25.....	21	7	
Do.....	Jan. 2-Apr. 1.....	20	25	
Hermosillo.....	Dec. 12-Mar. 4.....	141	29	Feb. 13, from 50 to 100 (estimated) cases present within radius of 50 miles of city.
Juarez.....	Feb. 11-Mar. 19.....	13		
Mazatlan.....	Jan. 26-Mar. 28.....	65	32	Including 53 cases brought, Feb. 9-15, from Sonora.
Mexico City.....				Feb. 29, 2 cases on train from Mexico City to El Paso.
Monterey.....	Dec. 13-19.....	5	3	
Do.....	Jan. 2-Apr. 2.....	21		
Naco.....	Feb. 15.....	2		
Nogales.....	Feb. 7-Mar. 4.....	27	3	
Piedras Negras.....	Jan. 10-Apr. 3.....	20	5	
Progreso.....	Dec. 5-18.....	2		
Salina Cruz.....	Jan. 1-15.....	1	1	
Tampico.....	Dec. 7-31.....		21	Jan. 14: Epidemic; estimated number of cases, 100.
Do.....	Jan. 1-Mar. 10.....		89	
Vera Cruz.....	Dec. 13-Jan. 1.....	34	29	
Do.....	Jan. 3-Mar. 26.....	95	81	
Netherlands:				
Amsterdam.....	Jan. 15-Mar. 11.....	18	3	
Persia:				
Teheran.....	Nov. 25-Dec. 10.....		140	
Portugal:				
Lisbon.....	Dec. 5-26.....	4		
Do.....	Feb. 13-Mar. 11.....	7		
Russia:				
Petrograd.....	Oct. 21-Dec. 25.....	125	37	
Do.....	Jan. 2-Feb. 5.....	148	58	
Riga.....	Nov. 11-Jan. 1.....	6		Aug. 1-31, 1915: Cases, 10; deaths, 1.
Siberia—				
Vladivostok.....	Dec. 29-Jan. 4.....	10	3	
Siam:				
Bangkok.....	Nov. 28-Dec. 4.....		1	
Spain:				
Cadiz.....	Dec. 1-31.....		1	
Madrid.....	Nov. 1-Dec. 31.....		41	
Do.....	Jan. 1-Feb. 29.....		68	
Seville.....	Dec. 1-31.....		7	
Do.....	Jan. 1-31.....		6	
Tarragona.....	Feb. 13-19.....		1	
Valencia.....	Nov. 21-Jan. 1.....	141	10	
Do.....	Jan. 2-Mar. 11.....	70	3	
Straits Settlements:				
Penang.....	Dec. 26-Jan. 1.....	2	1	
Do.....	Jan. 2-29.....	11	4	
Singapore.....	Nov. 28-Jan. 1.....	3		
Do.....	Jan. 16-Feb. 12.....	9	2	
Switzerland:				
Basel.....	Nov. 29-Dec. 25.....	43		
Do.....	Jan. 30-Mar. 4.....	38		Jan. 16-22, 1916: Cases, 13, received out of date.
Turkey in Asia:				
Beirut.....	Oct. 10-Dec. 25.....	75	31	
Do.....	Jan. 9-Feb. 12.....	18	7	
Union of South Africa:				
Johannesburg.....	Oct. 17-23.....	2		
Uruguay:				
Montevideo.....	Oct. 1-31.....	1		
Venezuela:				
Tachira, State.....	Mar. 12.....			Present.

TYPHUS FEVER.

Argentina:				
Rosario.....	Oct. 1-31.....		1	
Do.....	Jan. 1-31.....		1	
Austria-Hungary:				
Austria:				Nov. 14-Dec. 1, 1915: Cases, 490.
Trieste.....	Feb. 6-12.....	6		Jan. 9-15, 1916: Cases, 235.
Vienna.....	Jan. 23-29.....	12	2	
Hungary:				Jan. 24-Feb. 6, 1916: Cases, 50; deaths, 4.
Budapest.....	Dec. 12-31.....	3	1	
Do.....	Jan. 1-Feb. 26.....	14		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Antung.....	Nov. 22-Dec. 5.....	2		
Do.....	Mar. 13-19.....	1		
Cuba:				
Habana.....	Feb. 1-10.....	2	1	Imported from Mexico.
Egypt:				
Alexandria.....	Nov. 12-Dec. 31.....	5	2	
Do.....	Jan. 1-Feb. 18.....	14	8	
Cairo.....	Aug. 13-Dec. 31.....	73	40	
Port Said.....	Nov. 19-Dec. 31.....	1	2	
Germany:				Feb. 6-19, 1916: Cases, 69; deaths, 16; prisoners. Feb. 20-Mar. 4, 1916: Cases, 43; death, 1.
Aix la Chapelle.....	Jan. 9-29.....		2	
Berlin.....	Nov. 21-Jan. 1.....		7	
Do.....	Jan. 30-Feb. 26.....		4	
Bremen.....	Nov. 28-Dec. 4.....	1	1	
Do.....	Jan. 23-Feb. 26.....	1	3	
Bromberg, Govt. district.....	Feb. 20-26.....	1		
Dortmund.....	Dec. 12-18.....	1	1	
Erfurt.....	Dec. 19-25.....		1	
Do.....	Jan. 2-Mar. 4.....		4	
Frankfort on Main.....	Feb. 5-11.....	1		
Hanover.....	Nov. 21-Dec. 25.....	2	2	
Do.....	Jan. 9-22.....	2	2	
Königsberg.....	Nov. 28-Jan. 1.....	10		
Do.....	Jan. 1-Mar. 4.....	17	4	
Lübeck.....	Nov. 7-Dec. 31.....	3	2	
Do.....	Jan. 1-8.....	1		
Marburg.....	Feb. 20-26.....	1	1	
Merseburg, Govt. district.....	Dec. 26-Jan. 1.....	1		
Oppeln, Govt. district.....	Jan. 23-29.....	1	1	
Saxe-Coburg-Gotha.....	Dec. 5-18.....	3		
Do.....	Jan. 9-15.....	1		
Saxony.....	Feb. 20-26.....	37	6	
Settin, Govt. district.....	Dec. 5-25.....		2	
Do.....	Jan. 9-20.....	1		
Great Britain:				
Dundee.....	Dec. 12-18.....	3		
Glasgow.....	Feb. 11-Mar. 1.....	9		
Liverpool.....	Dec. 5-18.....	3	2	
Do.....	Mar. 5-11.....	1	1	
Manchester.....	Jan. 23-29.....	5	1	
Greece:				
Saloniki.....	Oct. 24-Feb. 6.....		203	Dec. 10: Present among troops.
Yehije-Vardar.....	Dec. 10.....			Present among troops.
Italy:				
Palermo.....	Dec. 13-19.....	3		
Do.....	Jan. 3-9.....	3		
Japan:				
Tokyo.....	Feb. 27-Mar. 17.....	110		Jan. 1-Mar. 17, 1916: Cases, 155.
Java:				Oct. 15-Dec. 30, 1915: Cases, 42; deaths, 28. Jan. 3-10, 1916: Cases, 13; deaths, 2.
Batavia.....	Oct. 25-Jan. 29.....	52	18	
Samarang.....	Oct. 22-Dec. 7.....	7	1	
Do.....	Jan. 1-13.....	7	2	
Mexico:				
Aguascalientes.....	Dec. 13-Jan. 2.....		12	
Do.....	Jan. 10-Mar. 26.....		48	
Guadalajara.....	Dec. 25-31.....	6	2	
Do.....	Feb. 6-Apr. 1.....	128	29	
Hermosillo.....	Feb. 4-22.....	3	3	
Juarez.....	To Mar. 19.....	5		
Mexico City.....	Dec. 23.....			Prevalent.
Do.....	Jan. 12.....		1	Jan. 1-31, 1916: Cases, 2,001; deaths, 488.
Monterey.....	Jan. 3-9.....	1		
Oaxaca.....	Dec. 9.....		1	American.
Piedras Negras.....	Mar. 5-18.....	2		
Queretaro.....	Dec. 16.....			Prevalent. Estimated number cases, 500.
Salina Cruz.....	Dec. 16-21.....	1		
Do.....	Feb. 1-15.....	1		In person from Mexico City.
Tampico.....	Dec. 1-31.....		1	
Do.....	Jan. 11-20.....		1	
Vera Cruz.....	Feb. 7-Mar. 26.....		3	
Russia:				
Moscow.....	Dec. 7-27.....	28	5	Nov. 28-Dec. 11, 1915: Cases, 22.
Do.....	Jan. 2-Feb. 19.....	557	62	
Petrograd.....	Oct. 24-Dec. 25.....	34	6	
Do.....	Jan. 2-Feb. 5.....	24	8	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—
Continued.

Reports Received from Jan. 1 to Apr. 21, 1916—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Riga.....	Nov. 14-20.....	12	.....
Vladivostok.....	Oct. 8-Nov. 13....	21	6	
Spain:				
Madrid.....	Nov. 1-30.....	.....	1	
Do.....	Feb. 1-29.....	.....	1	
Sweden:				
Stockholm.....	Dec. 26-Jan. 1....	1	.....
Do.....	Feb. 6-26.....	5	.....
Switzerland:				
Zurich.....	Jan. 16-22.....	1	.....
Turkey in Asia:				
Aleppo.....	Oct. 26-Nov. 1....	.....	.....	Estimated deaths, 200 daily.
Beirut.....	Nov. 21-27.....	7	3	
Do.....	Jan. 23-Feb. 12....	11	6	
Mersina.....	Nov. 21-27.....	3	.....

YELLOW FEVER.

Ecuador:				
Guayaquil.....	Nov. 1-30.....	1	1	

SANITARY LEGISLATION.

COURT DECISIONS.

UNITED STATES DISTRICT COURT—WESTERN DISTRICT OF TENNESSEE.

Harrison Antinarcotic Law—Shipment of Opium in Interstate Commerce—Possession of Smoking Opium.

UNITED STATES v. JOHNSON, 228 Fed. Rep., 251. (Dec. 11, 1915.)

The fourth section of the Harrison Antinarcotic Law makes it unlawful to ship any of the drugs included in the terms of the law in interstate commerce except under certain circumstances. The court held that a person who induced another person to ship opium from one State to another, neither of the persons having registered under the law, was guilty as a principal of violating the law.

Under the Federal law of January 17, 1914, the mere possession of opium prepared for smoking constitutes an offense unless the person indicted can show that the opium was not imported after April 1, 1909.

McCALL, District Judge: The defendant was tried and convicted at the present term of court, under an indictment of two counts. In the first count, he is charged with aiding, abetting, inducing, and procuring the commission of an act constituting an offense against the United States, as defined by an act of Congress of December 17, 1914, known as the Harrison Narcotic Law, by inducing one P. H. Martin to ship cooked opium for smoking purposes from New Orleans, La., to Memphis, Tenn.; the said P. H. Martin not being duly registered and not having paid the special tax, as required under section 1 of the Harrison Narcotic Law. Count 2 charges the defendant with unlawfully receiving, concealing, and buying opium cooked up for smoking purposes, knowing the same to have been imported contrary to law.

The evidence was conclusive that P. H. Martin shipped cooked opium, prepared for smoking, from New Orleans, La., to the defendant, Johnnie Johnson, Memphis, Tenn., on the order and request of Johnson, who sent the price thereof to Martin before shipment. Johnson is indicted in the first count as an aider and abettor in the commission of the offense; it being charged and proven that Martin had not paid the special tax, and was not duly registered as required by section 1 of the Harrison Narcotic Law. It is sought to hold Johnson as a principal. Section 332 of the Penal Code provides that:

Whoever directly commits any act constituting an offense defined in any law of the United States, or aids, abets, counsels, commands, induces or procures its commission, is a principal.

The fourth section of the Harrison Narcotic Law provides that:

That it shall be unlawful for any person who shall not have registered and paid the special tax as required by section 1 of this act to send, ship, carry, or deliver any of the aforesaid drugs from any State or Territory or the District of Columbia, or any insular possession of the United States, to any * * * other State or Territory or the District of Columbia or any insular possession of the United States: *Provided*, That nothing contained in this section shall apply to common carriers engaged in transporting the aforesaid drugs, or to any employee acting within the scope of his employment, or any person who shall have registered and paid the special tax as required by section 1 of this act, or to any person who shall deliver any such drug which has been prescribed or dispensed by a physician, dentist, or veterinarian required to register under the terms of this act, who has been employed to prescribe for the particular patient receiving such drug, or to any United States, State, county, municipal, district, territorial, or insular officer or official acting within the scope of his official duties.

The Government insists, it having alleged and proved that Martin had not registered and paid the special tax as required by section 1 of the act, and that he is not one of the persons exempted under the proviso of said fourth section of said act, and that he was guilty of the offense of sending, shipping, carrying, or delivering a parcel of said drugs mentioned in said act, to wit, opium prepared for smoking, from New Orleans, in the State of Louisiana, to the defendant in Memphis, in the State of Tennessee, and it also having proven that the defendant Johnson ordered, requested, and induced Martin to ship him the opium, that under section 332 of the Penal Code he is guilty as a principal. This insistence by the Government seems to me to be sound.

The second count, as has been seen, charges the defendant with having unlawfully received, concealed, and bought opium, cooked up for smoking purposes, knowing the same to have been imported contrary to law, in violation of section 2 of an act of Congress of January 17, 1914, which is as follows:

That if a person shall fraudulently or knowingly import or bring into the United States, or assist in so doing, any opium or any preparation or derivative thereof contrary to law, or shall receive, conceal, buy, sell, or in any manner facilitate the transportation, concealment, or sale of such opium or preparation or derivative thereof after importation, knowing the same to have been imported contrary to law, such opium or preparation or derivative thereof shall be forfeited [etc.]. Whenever, on trial for a violation of this section, the defendant is shown to have, or to have had, possession of such opium or preparation or derivative thereof, such possession shall be deemed sufficient evidence to authorize conviction unless the defendant shall explain the possession, to the satisfaction of the jury.

It was shown indisputably that the defendant had in his possession opium prepared for smoking purposes. Section 3 of the act of Congress, *supra*, provides:

That on and after July 1, 1913, all smoking opium or opium prepared for smoking found within the United States shall be presumed to have been imported after the 1st day of April, 1909, and the burden of proof shall be on the claimant or the accused to rebut such presumption.

There is absolutely no evidence tending to rebut this presumption of law; the undisputed evidence being that the defendant procured Martin to obtain in New Orleans, for him, opium prepared for smoking purposes, and it was found in defendant's possession. So it would seem to follow that the defendant would be guilty under this count in the indictment, except for the last clause in section 2, which provides in substance that the possession of the opium shall be sufficient evidence to authorize conviction, "*unless the defendant shall explain the possession to the satisfaction of the jury.*"

His explanation was that he was an addict to opium smoking and that he had requested and induced his friend Martin, in New Orleans, to procure a quantity of smoking opium for and ship it to him. The purpose for which he had it in his possession seems to be sufficiently explained, but does that avail him, in the face of the provisions of the third section of said act, which provides in substance that all smoking opium found in the United States after July 1, 1913, shall be presumed to have been imported after the 1st day of April, 1909, and placing upon the defendant the burden of rebutting that presumption?

As I read these two sections, it seems to me that under an indictment charging a person with receiving, concealing, or buying opium prepared for smoking, and found in his possession after July 1, 1913, knowing the same to have been imported contrary to law, as is charged in this case, then the mere possession of such opium after the last-named date would constitute an offense, unless the party indicted rebuts the presumption of importation, as required by the act, regardless of the purposes for which he may have had it in his possession. There was no evidence tending to rebut the presumption of importation.

It results from what has been said that the motion for a new trial will be overruled.

UNITED STATES DISTRICT COURT—NORTHERN DISTRICT OF IOWA.
Harrison Antinarcotic Law—Possession of Habit-Forming Drugs by a Person not
Required to Register not a Violation of the Law.

UNITED STATES V. CARNEY, 228 Fed. Rep., 163. (Dec. 7, 1915.)

Section 8 of the Harrison antinarcotic law provides that "It shall be unlawful for any person not registered under the provisions of this act, and who has not paid the special tax, * * * to have in his possession or under his control any of the aforesaid drugs, and such possession or control shall be presumptive evidence of a violation of this section, and also * * * of section 1 of this act." The court held that section 8 refers only to persons who are required by the law to register and pay the special tax, and that possession of the drugs referred to in the law by a person who does not produce, import, manufacture, or distribute the drugs is not a violation of the provisions of this section.

REED, District Judge: The indictment (omitting formal parts) charges:

"That on or about the 15th day of September, 1915, at Mason City, Iowa, within the jurisdiction of this court, the defendant did, knowingly and unlawfully, have in his possession a large quantity of morphine, to wit, about 140 tablets, each containing one-fourth of a grain of morphine, which said morphine was a derivative of opium, without having theretofore registered with the collector of internal revenue for the district of Iowa his name and place of business, and paid to said collector the special tax as provided and required by the act of Congress approved December 17, 1914, relating to the production, importation, manufacture, compounding, sale, dispensing, or giving away of opium or coca leaves, their salts, derivatives, or preparations, contrary to the statute in such case made and provided."

The defendant demurs to the indictment upon the ground alone that it charges no offense.

* * * * *

The demurrer presents the single question: Does the indictment sufficiently charge the defendant with a violation of any of the provisions of this act? It is not alleged that defendant was or had been engaged in any business that required him to register and pay the special tax as required by the act; nor is anything alleged showing his possession of the tablets to be unlawful, save only the legal conclusion that defendant did "knowingly and unlawfully" have in his possession the 140 tablets, each containing one-fourth grain of morphine.

* * * * *

The constitutional validity of the act is not challenged, and, of course, will not be considered.

* * * Section 1 provides that on and after March 1, 1915, every person who produces, imports, manufactures, deals in, dispenses, sells, distributes, or gives away any of the drugs mentioned shall register with the proper revenue collector his name and place or places where such business is to be carried on and pay to the collector the special tax required. Plainly it is only the person or persons who engage in dealing in or in some manner handling the drugs as a part of his or their business that are to register and pay the required tax, and persons or associations not so engaged are not within its terms. The act is highly penal in its nature, and must be so construed as to include only those who are clearly within its terms. The provisions in section 1, that all provisions of existing law relating to special taxes, so far as applicable, are extended to the special tax herein imposed, indicates that the construction given by the Supreme Court to the "special-tax law," which is section 3232 et seq., of the Revised Statutes of the United States (Comp. St. 1913, sec. 5955 et seq.), is applicable to this act.

It seems quite clear that the act in question is to be construed as one imposing a tax upon those who engage in dealing in and handling the drugs mentioned as a part of their business, and that a single sale, or having in possession a small quantity of the drug, by one not engaged in the business of dealing in them, is not within the terms of the act.

But it is urged in behalf of the Government, that possession alone of the drug by any one under section 8 of the act is unlawful, unless such person has registered and

paid the tax as required by the act, and that an indictment charging any one with having possession of the drug is sufficient. Section 8 reads in this way:

That it shall be unlawful for any person not registered under the provisions of this act, and who has not paid the special tax, * * * to have in his possession or under his control any of the aforesaid drugs, and such possession or control shall be presumptive evidence of a violation of this section, and also * * * of section 1 of this act.

The possession forbidden by this section is of a person "not registered under the provisions of this act." Plainly the person who has not so registered and paid the required tax refers only to one who is required by section 1 of the act to register and pay such tax. No other possession is referred to by this section of which there can be a violation, other than the possession of one who is required by section 1 to register and pay the tax. The section will reasonably bear no other interpretation; and as the defendant is not charged with being a person required by the act to register, or with having engaged in any business that requires him to do so, the indictment fails to charge an offense against him under this act. It was so held by Judge McCall in *United States v. Friedman*¹ (D. C.), 224 Fed. 276; and *United States v. Wilson*² (D. C.), 225 Fed. 82; by Judge Bourquin in *United States v. Woods*³ (D. C.), 224 Fed. 278; and by Judge Thomson in *United States v. Jin Fuey Moy*⁴ (D. C.), 225 Fed. 1003; upon indictments quite similar to the one in question.

A contrary conclusion, it is true, was reached in *United States v. Brown*⁵ (D. C.), 224 Fed. 135, by Judge Neterer in the western district of Washington; but I am not satisfied that the conclusion reached by him is correct. It is by him assumed that the act in question is intended to prohibit the importation of opium for any purpose whatever, and that the drug is therefore an "outlaw" in this country, and for that reason Congress may rightly prohibit its importation, and that this was intended by the act in question. It seems to me that this conclusion is unwarranted; for by the act of Congress approved February 9, 1909 (35 Stat. 614, c. 100 [Comp. St. 1913, secs. 8800, 8801]), the importation of opium for other than the purpose of smoking is permitted under such rules and regulations as the Secretary of the Treasury may prescribe; and section 12 of the act in question especially provides that nothing contained therein shall be construed to impair, alter, or repeal any of the provisions of the act of Congress approved February 9, 1909, or any amendment thereof. Opium, therefore, and its derivatives, when imported under the provisions of that act, are legitimate articles of commerce. It seems entirely clear that a purchaser of opium, or some compound or derivative thereof, for medicinal use, from one authorized to sell or to dispense it, and who has it in his possession for such purpose, should not be required to register or pay the special tax exacted only because of such possession. The act in question does not in plain terms so provide, and it is not within the rightful power of the courts to add such a provision thereto, either directly or impliedly, and an indictment that fails to charge facts showing the possession of one to be unlawful does not charge an offense within the terms of this act.

The last proviso in section 8 above, "that it shall not be necessary to negative any of the aforesaid exemptions in any complaint or indictment under this act," is but declaratory of the existing rule of pleading in the Federal courts in criminal cases. Exemptions from liability for offenses created by acts of Congress are matters of defense; but matters excepted from the granting clause of the act are not within the terms of the act, and such matters must be negated in the indictment or complaint.

I therefore reach the conclusion that the demurrer to this indictment should be sustained, the defendant discharged, and his bail exonerated. It is accordingly so ordered.

¹ Public Health Reports, Dec. 24, 1915, p. 3777.

² Public Health Reports, Jan. 21, 1916, p. 141.

³ Public Health Reports, Dec. 17, 1915, p. 3715.

⁴ Public Health Reports, Jan. 21, 1916, p. 143.

⁵ Public Health Reports Dec. 10, 1915, p. 3631.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

EAST ORANGE, N. J.

Boarding Houses for Infants and Children—Regulation—License Required. (Reg. Bd. of H., Oct. 7, 1915.)

SECTION 1. That it shall be unlawful for any person, firm, corporation or association to conduct or maintain a boarding house for infants and children without having a written license therefor from the board of health: *Provided*, That nothing in this ordinance shall apply to any institution maintained by the State of New Jersey or by any municipality thereof, or by any incorporated charitable society for the placing of infants and children.

SEC. 2. The term "boarding house for infants and children" shall mean any children's home, orphanage, or other institution or individual engaged in receiving, caring for, and finding homes for orphans, dependent or neglected children, or any house or other place maintained by anyone who holds himself out as conducting a boarding house for infants or who has in his custody one or more infants unattended by their parents or guardians for the purpose of providing such children with food or lodging, excepting children related to him by blood or marriage, or who have been legally adopted by him.

SEC. 3. Each license shall be granted for a term ending on the 31st day of December next ensuing the date of its issue. No such license shall be issued until the premises sought to be licensed shall have been inspected by a representative of the board of health and shall have been reported by him to said board of health as satisfactory as hereinafter provided. Every such license shall state the name of the licensee, the particular premises in or at which the business shall be carried on and the maximum number of inmates that may be boarded and cared for at any one time. Said license shall be posted in a conspicuous place on the premises where the business is conducted. No greater number of inmates shall be kept at one time on the premises than is authorized in the license. No infants and children shall be kept within a building or place not mentioned in the license. All parts of the premises shall be kept in a clean and sanitary condition with ample provisions for light and fresh air. The inmates shall be kept clean and properly clothed, and shall be fed with wholesome food, and shall be given proper medical attention. Any of the inmates shall be brought by the licensee to the baby welfare weighing classes as often as required by said board. The board of health shall, as often as it seems desirable, inspect or designate persons to inspect the premises and investigate the manner of conducting business thereon. Said board or such persons shall have the right to inquire into all matters concerning said licensed premises and the children therein, and it shall be the duty of the licensee to give all information to such persons and afford them every reasonable facility for inspecting the premises and seeing the inmates thereof.

SEC. 4. Every license shall be subject to revocation for the violation of any of the provisions of this ordinance.

SEC. 5. Any person who shall violate any of the provisions of this ordinance, upon conviction thereof, shall be punished by a fine not exceeding \$50.

SEC. 6. A license fee of \$5 shall be paid by any applicant for each such license to the said board of health before any such license shall be granted or issued and the holder of any such license shall pay a further fee of \$5 for each annual renewal and reissue of such license.

GALVESTON, TEX.

Maritime Quarantine—Prevention of Plague—Rat Guards. (Ord. Sept. 30, 1915.)

SECTION 1. It shall be the duty of any person in charge of any vessel that is docked, berthed, or moored to any wharf, pier, or bulkhead, or alongside any other vessel so moored in the harbor of Galveston to furnish upon request the following information to the boarding city health officer or his representative:

- (a) Name of vessel.
- (b) Name of the master.
- (c) Name of the agent or consignee.
- (d) Character of the cargo contained in said vessel.
- (e) Name of the port from which said vessel sailed.
- (f) Name of all ports at which said vessel may have touched or called since said sailing.
- (g) Time and place and where said vessel was last fumigated.

Refusal to furnish this information shall render such person liable for penalties as hereinafter provided.

SEC. 2. It shall be unlawful for any person in charge of any vessel to dock, berth, or moor, or to cause to be docked, berthed, or moored, any such vessel at or to any wharf, pier, or bulkhead in the harbor of Galveston unless said vessel shall be fended away from such pier, wharf, or bulkhead (except during stormy weather, or by and with the consent and permission of the city health officer or his representatives) a distance of not less than 8 feet, by efficient pontoons or rafts.

SEC. 3. It shall be unlawful for any person in charge of any vessel to lay, fasten, or cause to be laid or fastened any line, rope, or cable from such vessel to any pier, wharf, or bulkhead, or to any other vessel so moored, in the harbor of Galveston, unless such line, rope, or cable is fixed and equipped with what is known as a "rat protector" or "rat guard," the same to be not less than 36 inches in diameter and of an efficient pattern and design, and in all cases the rat protector or rat guard on each line, rope, or cable of such vessel shall be fixed and installed not more than 3 feet distance from side of said vessel and in such manner as to prevent the passage of rats.

SEC. 4. It shall be unlawful for any person in charge of any vessel to lay, fasten, or cause to be laid or fastened any line, rope, or cable from such vessel to any wharf, pier, or bulkhead, or to any other vessel so moored, in the harbor of Galveston, on which it is impossible to fix and maintain a rat protector or rat guard within the distance designated in section 3 of this ordinance, unless such line, rope, or cable is provided with a freshly tarred piece of canvas or tarpaulin, retarred every night, said canvas or tarpaulin to be securely wrapped around said lines, ropes, or cables for a distance of not less than 3 feet in length from the side of said vessel.

SEC. 5. It shall be unlawful for any person in charge of any such vessel that is not fended away from any pier, wharf, or bulkhead a distance of 8 feet, to dock, berth, or moor any such vessel to any pier, wharf, or bulkhead in the harbor of Galveston unless all hawse pipes, deck ports, cabin scuttles, scuppers, and all other openings on shore side are properly screened or covered with a freshly tarred piece of tarpaulin or canvas, retarred every night, said screen, canvas, or tarpaulin to be securely lashed in place so as to prevent the passage of rats.

SEC. 6. It shall be unlawful for any person in charge of any such vessel to lay, place, or install, or cause to be laid, placed, and installed any ladder, rope ladder, steps, gangplank, or gangway from such vessel to any other vessel, or to any pier,

wharf, or bulkhead in the harbor of Galveston between the hours of sunset and sunrise except during such time as said vessel may be actually receiving or discharging cargo or passengers, and immediately upon such vessel's ceasing to receive or discharge cargo or passengers, any and all ladders, rope ladders, planks, steps, gangplanks or gangways leading from said vessel to any other vessel, or to any wharf, pier, or bulkhead shall be withdrawn and removed, with the exception of one ladder for the accommodation of said vessel's crew, said ladder to be well lighted with brightly burning lamps, to be kept in place about 12 to 14 inches apart at the top and bottom of said ladder. The person in charge of said vessel shall also maintain a night guard at top of said ladder and said ladder is to be made rat proof by means of a well-tarred piece of board or canvas at top and bottom of said ladder.

SEC. 7. It shall be unlawful for any person in charge of any vessel to lay, place, or install, or cause to be laid, placed, and installed any ladder, rope ladder, step, gangway or gangplank from such vessel to any other vessel, or to any pier, wharf, or bulkhead in the harbor of Galveston between the hours of sunset and sunrise, except during such time as said vessel may be actually receiving or discharging cargo or passengers, and immediately upon such vessel's ceasing to receive or discharge cargo or passengers, any and all ladders, rope ladders, planks, steps, gangplanks, or gangways leading from said vessel to any other vessel or to any pier, wharf, or bulkhead without exception, shall be withdrawn and removed when so ordered by the city health officer or his representatives.

SEC. 8. It shall be unlawful for any person to throw or discharge any organic refuse, galley scraps, or wastes on the wharves or part of the wharves of the harbor of Galveston or into or upon the waters of Galveston Harbor.

SEC. 9. It shall be unlawful for any person in charge of any vessel to permit the throwing of or discharging of galley scraps or wastes into the waters of the harbor of Galveston, or upon the wharves of Galveston Harbor, said galley scraps and other wastes to be burnt in the ship's furnace.

SEC. 10. It shall be unlawful for any person in charge of any vessel to permit the use of any and all water-closets on the shore side of said vessel when other water-closets are available.

SEC. 11. By the term "any person in charge of any vessel," as used in this ordinance, is meant any person who as a master or officer is in charge of and has authority over said vessel.

SEC. 12. It shall be unlawful for any person in charge of any vessel that has not been fumigated, and having sailed from or having touched at a port infected or suspected of infection with bubonic plague to discharge or permit to be discharged any freight, cargo, or passengers without maintaining a strict watch on all gangways, planks, or steps leading from said vessel to prevent the passage of rats.

SEC. 13. It shall be unlawful for any person in charge of any vessel having sailed from or having touched at a port infected or suspected of infection with bubonic plague to remove any crated cargo from such vessel until said cargo shall have been carefully inspected by a competent inspector appointed for this purpose by the health officer of the city of Galveston, to insure against rats being brought ashore, and said inspector shall be paid for his service by the person in charge of said vessel.

SEC. 14. Any person who shall violate any section of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than \$10 nor more than \$200.

GREENWICH, CONN.

Communicable Diseases—Notification of Cases—Removals—Placarding—Quarantine—Disinfection—School Attendance—Burial—Vaccination. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 2. SECTION 1. *Communicable diseases.*—Every physician shall report in writing to the health officer, within 12 hours after his recognition of the disease, giving name, age, and exact address of any patient suffering from:

Cerebrospinal meningitis, .
 Chicken-pox,
 Cholera,
 Diphtheria,
 Dysentery—
 (a) amebic,
 (b) bacillary,
 German measles,
 Glanders (farcy),
 Gonorrhea,
 Infantile paralysis,
 Leprosy,
 Malaria,
 Measles,
 Membranous croup,
 Mumps,

Plague,
 Ophthalmia neonatorum,
 Rabies,
 Scarlet fever,
 Septic sore throat,
 Smallpox,
 Syphilis,
 Epidemic conjunctivitis,
 Tetanus,
 Trachoma,
 Tuberculosis (in any form),
 Typhoid fever,
 Typhus fever,
 Whooping cough,
 Yellow fever,

or any other communicable disease so declared by the health officer, including those of a venereal nature, except that in reporting any disease of a venereal nature the name of the patient suffering from the same shall not be disclosed.

SEC. 2. When any person in any public or private home, hospital, dispensary, hotel, boarding or lodging house, or tenement house, has or is suspected of having any communicable disease, the householder, proprietor, superintendent, manager, clerk, or other person in charge or control thereof, shall, within 12 hours, report in writing to the health officer, the name of such person and the disease, if no physician has in the meantime been called to attend the case, and shall furnish, when requested by said health officer, all other information relative thereto called for by him.

SEC. 3. No person shall, without a permit from the health officer, knowingly remove or cause to be removed any person afflicted with a communicable disease, or the body of any person having died of a communicable disease, or clothing or other property that may have been exposed to the infection of a communicable disease, from any building or place to any other building or place, or from any vessel to any other vessel, or to the shore, or to any public vehicle.

SEC. 4. No superintendent, principal, or teacher of any school and no parent or guardian of any child, shall permit a child having smallpox, scarlet fever, diphtheria, membranous croup, measles, German measles, whooping cough, consumption, chicken-pox, mumps, conjunctivitis, sore throat, scabies (itch), trachoma, or child afflicted with lice to attend school, and such superintendent, principal, or teacher shall immediately report any such case to the health officer. Nor shall any child residing in any household in which such disease shall exist, or any child afflicted with a rash or an eruption, be allowed to attend school without a written permit from the health officer.

SEC. 5. No person affected with smallpox, chicken-pox, epidemic conjunctivitis, diphtheria, membranous croup, plague, scarlet fever, whooping cough, measles, German measles, or mumps shall attend any public meeting or assembly, or travel in any public conveyance or upon a public highway or street.

SEC. 6. Warning of the existence of diphtheria, membranous croup, typhus fever, measles, smallpox, whooping cough, or plague in any building shall be given to the public by placing conspicuously on the outside near each common entrance to said dwelling a placard giving the name of said disease. Said placard shall be placed by and shall remain until the same is removed by order of the health officer, and no person or persons shall remove said placard without the authority of the health officer.

SEC. 7. Whenever a placard shall be placed, as provided in section 6, no person or persons, except the medical attendants and nurses, shall either enter therein or depart therefrom without the permission of the health officer.

SEC. 8. All cases of diphtheria, membranous croup, typhus fever, smallpox, scarlet fever, measles, or other communicable disease reported in this town, or of which the health officer has information, shall be quarantined in such manner as he may direct. All buildings, clothing, property, premises, and vehicles which may be infected shall be disinfected as the health officer may direct. No premises shall be disinfected after diphtheria until two negative cultures from the nose or throat of the patient have been taken at an interval of at least 48 hours. If positive cultures persist, the patient may be released from quarantine when the health officer is satisfied, by inoculation experiments (or otherwise), that the bacilli are nonvirulent.

SEC. 9. No person from any dwelling wherein a disease dangerous to the public health exists shall take any book or magazine to or from any circulating library or school. The health officer shall inform the librarian of all cases of said diseases, and until a written permit is given no book or magazine shall be taken to or returned from a dwelling wherein such case exists.

SEC. 10. No person shall remove any milk bottle from a building wherein a disease dangerous to the public health exists, or has existed, until he has first obtained permission in writing from the health officer.

SEC. 11. No person shall knowingly bring or cause to be brought into the town of Greenwich any person infected with a communicable disease, except upon a permit granted by the health officer; and no person shall knowingly bring or cause to be brought into said town any article liable to propagate a communicable disease.

* * * * *
ART. 3. SECTION 1. *Quarantine*.—When any communicable disease shall exist in any house, the owner, occupant, or person in charge of said house shall carry out such quarantine and shall disinfect the premises at such times and in such manner as the health officer may order.

SEC. 2. No clothing, furniture, book, or other article shall be removed from quarantined premises until released by the health officer.

SEC. 3. All disinfection required by the health officer shall be done according to his direction.

SEC. 4. As soon as the patient is convalescent from a communicable disease, the health officer shall be notified by the attending physician, or in the event of there being no attending physician, by the person in charge. In case of death from any communicable disease, the undertaker or person in charge of the body shall notify the health officer.

SEC. 5. No person shall enter or leave quarantined premises unless permitted to do so by the health officer.

ART. 4. SECTION 1. *Funerals*.—No person shall allow to be retained unburied the dead body of any human being for a longer time than four days, or where death has been caused by cholera, yellow fever, typhus fever, smallpox, typhoid fever, diphtheria, membranous croup, or scarlet fever for a longer time than 36 hours after the death of such person without a permit from the health officer, which permit shall specify the length of time during which such body may remain unburied, and when death has been caused by one of the diseases herein mentioned the body shall be immediately thereafter disinfected or inclosed in a hermetically sealed coffin, which shall not

thereafter be opened, and the funeral of such person, except when death has been caused by typhoid fever, shall be held only at such place as shall be permitted by the health officer, and shall be attended only by the undertaker, his assistants, persons living in the house where such person died, by a clergyman, and such other persons as the health officer may specially permit, all of whom shall take such precautions as the health officer may direct. In the removal thereof, for burial or otherwise, the body shall not be carried in a vehicle with other passengers. The bedding, clothing, and furniture of the room wherein such person died shall be disinfected and otherwise treated as the health officer may order.

SEC. 2. Every undertaker having notice of the death of any person within the town of Greenwich from smallpox, diphtheria, membranous croup, scarlet fever, typhus fever, Asiatic cholera, leprosy, measles, tuberculosis, or any other communicable disease dangerous to the public health, or of the bringing of the dead body of any person who has died of any such disease into said town shall give notice within 12 hours thereof to the health officer.

ART. 5. SECTION 1. *Vaccination.*—No child shall be permitted to attend any public, private, or parochial school without presenting satisfactory evidence that it has been vaccinated or has had smallpox.

SEC. 2. Every person who has been exposed to the infection of smallpox shall immediately be vaccinated.

SEC. 3. When in their opinion the danger of an epidemic of smallpox seems imminent the department of health may compel to be vaccinated all persons who in the opinion of said department are liable to infection.

Spitting—Prohibited in Public Places. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 8. SECTION 1. It shall be unlawful to spit or expectorate upon the sidewalk of any street, alley, thoroughfare, square, park, or other public place, or upon the floor, walls, seats of any public room, hall, or office in any hotel or other part of any tenement or lodging house which is used in common by the guests or inmates thereof, or upon the floor, walls, or other part of any theater, store, factory, or any room, store, or establishment where food is sold, prepared, or served, or of any building which is used in common by the public, or upon the floor of any street car or railroad car or other public conveyance, or upon the floor of any depot or station, or upon the platform or stairs thereof.

SEC. 2. Every person, firm, or corporation owning, operating, or controlling any factory, street car, railroad car, depot, station, or other common carrier is hereby required to keep permanently posted in each of said places a sufficient number of notices forbidding spitting.

Barbers and Barber Shops. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 7. SECTION 1. Every barber or other person in charge of any barber shop shall keep said barber shop at all times in a cleanly and sanitary condition. The walls and ceilings shall be properly painted, whitened, or papered, and the floor shall be kept in a clean condition. Every barber shop shall be properly lighted and ventilated.

SEC. 2. No person shall use any barber shop as a sleeping room or dormitory.

SEC. 3. Every barber or other person in charge of any barber shop shall supply running hot and cold water, and shall use hot-water tanks for no other purpose than that of heating water.

SEC. 4. Every barber or other person in charge of any barber shop shall sterilize all mugs, shaving brushes, razors, needles, clippers, shears, forceps, and other metal instruments in an approved manner after every separate use thereof.

SEC. 5. Every barber shop shall provide impervious cuspidors, which shall be thoroughly cleaned daily, and every barber shall see that no person shall expectorate on the floors or walls of his shop.

SEC. 6. Every barber or other person in charge of any barber shop shall use a separate and clean towel for every customer, and shall, while serving said customer, wear a washable apron or coat, which shall be kept clean.

SEC. 7. Every barber or other person in charge of any barber shop shall provide a roll of clean paper to be placed in the back of each chair in such a way that the same may be unrolled and constitute a headrest for the customer. No portion of the said paper shall be used for more than one customer, but each customer shall be provided with a fresh, clean section of the said paper: *Provided, however,* That as a substitute for the said paper any such person may use a clean towel as a headrest, and must use a separate and clean towel for each and every customer.

SEC. 8. Every barber or other person in charge of any barber shop shall use alum or other material to stop the flow of blood in powdered or liquid form only.

SEC. 9. No barber or other person in charge of any barber shop shall use sponges or powder puffs.

SEC. 10. Every barber or other person in charge of any barber shop shall cleanse his hands immediately before serving each customer.

SEC. 11. No barber or other person in charge of any barber shop shall shave a customer when the surface to be shaven is inflamed or broken out or contains pus, unless such person be provided with a cup, razor, and lather brush for his individual use.

SEC. 12. No barber or other person in charge of any barber shop shall undertake to treat any disease of the skin.

SEC. 13. No person suffering from venereal disease or other contagious infection or communicable disease shall act as a barber.

SEC. 14. Every barber or other person in charge of any barber shop shall post a copy of these regulations in a conspicuous place in said barber shop.

SEC. 15. Violations of these regulations shall be punished as provided by law.

Common Drinking Cups, Common Towels, and Common Eating and Drinking Utensils.—Prohibited in Public Places. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 6. SECTION 1. It shall be unlawful to expose, keep, provide, or permit any drinking vessel to be used in common in any public, private, or parochial school or Sunday school, hotel, lodging house, restaurant, depot, station, waiting room, boat, store, factory, hall, theater, moving-picture show, library, public building, or institution, street, park, or other public place.

SEC. 2. No glass, cup, dish, spoon, or other eating or drinking vessel or utensil used in or at any hotel, saloon, restaurant, drug store, soda fountain, or other place of public refreshment in the town shall be offered or permitted to be used by any other patron unless it has been thoroughly cleansed since it was last used and is thoroughly clean at the time it is offered for use.

SEC. 3. It shall be unlawful to expose, keep, provide, or permit any towel to be used in common in any school, hotel, lodging house, restaurant, depot, station, waiting room, boat, store, factory, hall, lavatory, public-comfort station, theater, public institution, or other public place.

Water-Closets, Privies, and Cesspools.—Location, Construction, and Maintenance.—Disposal of Contents. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 9. SECTION 1. All tenements, lodging houses, hotels, theaters, public institutions, and other buildings frequented and used by the public shall have adequate, clean, and sanitary water-closet facilities, separate for males and females, and conveniently located.

SEC. 2. No owner or agent of any real estate within the town of Greenwich, upon which a building is situated, shall let or lease the same for residential purposes, or permit the same to be occupied as a residence, unless the same be provided with a

water-closet or a privy either in the building or upon a lot on which said building is situated.

SEC. 3. No privy vault, cesspool, or reservoir into which a privy, water-closet, or sink is drained, except it be water-tight and fly proof, nor any other than a water-tight sewer or drain, shall be established or permitted so near a well, spring, or other source of water used for drinking or culinary purposes as contaminates or is likely to contaminate the same. When any privy vault or cesspool is discontinued, the contents shall be entirely removed and the vault filled with earth or other suitable material.

SEC. 4. No privy vault or cesspool shall hereafter be constructed or maintained on any lot or premises having a sewer connection or abutting on a street in which there is a sewer; and no privy vault, cesspool, or manure pit shall hereafter be constructed within 50 feet of any spring, well, or stream, within 5 feet of any party line or fence, within 15 feet of the line of any street or within 25 feet of the door or window of any dwelling house or store or dairy; nor shall any cover be put upon or over the same, nor shall the same be used until the said privy vault, cesspool, or manure pit has been inspected and approved by the health officer.

SEC. 5. No person shall keep and maintain upon his premises at any time any privy, water-closet, sink, or drain, cesspool, stable, or pigsty except in a sanitary condition. No person shall empty or allow to run into any street or highway in this town the contents, or any part thereof, of any cesspool, sink, stable, manure pit, barnyard, or pigsty.

SEC. 6. No person shall permit any sewage or stable drain, privy vault, cesspool, or sink upon his premises to empty into any stream, pond, or source of water or ice supply, nor permit the same to exist so near such stream, pond, or other water or ice supply that the contents thereof will drain or be likely to drain thereinto.

SEC. 7. No person shall throw into or deposit in any vault, sink, privy, or cesspool any offal, meat, fish, garbage.

SEC. 8. No person shall throw, dump, or deposit any filth, garbage, or animal or vegetable matter which is or is likely to be prejudicial to public health, upon any vacant lot, highway, or public place, nor in any brook, pond, or spring. This does not preclude the proper use of fertilizers upon the land.

SEC. 9. No rain-water leader, waste pipe, nor soil pipe shall discharge into or be connected with any privy vault or manure pit.

Domestic Animals—Communicable Diseases—Notification of Cases—Confinement of Animals—Disposal of Dead Bodies—Veterinary Hospitals. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 2. SEC. 12. Every veterinarian or other person who is called to examine or professionally attend any animal within the town of Greenwich having glanders (farcy), rabies, tuberculosis, or other communicable disease shall, within 24 hours thereafter, report in writing to the health officer the following facts:

1. A statement of the location of such diseased animal.
2. The name and address of the owner or person having charge of such diseased animal.
3. The type and character of the disease.

SEC. 13. Every animal that is mad or that has hydrophobia, or that shows symptoms thereof, shall be at once killed or else securely confined until the diagnosis is made. Every animal that has been exposed to such disease shall be at once confined in some secure place for such length of time as shall be deemed necessary by the health officer to show that such exposure has not given such animal said disease. The body of any animal that has died of such disease, or that, suspected of having such disease, has been killed, shall be disposed of as may be directed by the health officer. The department of health is empowered to take possession and complete control of any dog or other animal having or suspected of having rabies, or of any animal having been bitten

by, or suspected of having been bitten by, another animal having rabies, and may quarantine or kill any such animal at its discretion.

SEC. 14. No person, firm, or corporation shall erect, establish, or maintain any hospital for sick animals unless permission has been obtained from the department of health.

Garbage, Refuse, and Offal—Care, Disposal, and Removal. (Reg. Bd. of H., Oct. 25, 1915.)

ART. 12. SECTION 1. It shall be the duty of every owner, occupant, or person in charge of any and every dwelling or store to provide or cause to be provided, for such dwelling or store a water-tight iron or steel receptacle with tight cover for receiving and holding garbage and offal from said dwelling or store.

SEC. 2. All garbage and offal which shall accumulate anywhere in the town of Greenwich, or which is stored, kept, or retained therein, shall be kept in water-tight iron or steel receptacles provided with tightly fitting covers.

SEC. 3. No garbage receptacle shall be allowed to be overfilled, and all such receptacles shall be so covered as to exclude flies.

SEC. 4. No person shall collect, remove, or carry in or through any of the streets or highways of the town of Greenwich, the contents of any cesspool or privy vault except upon a written permit from the department of health and in accordance with the regulations of said department.

SEC. 5. No person shall engage in the business of transporting swill, garbage, offal, or any offensive or noxious substance, or drive any cart for such purpose through the streets or highways in the town of Greenwich, except under a license from the department of health, which is to be valid for one year and revocable at any time, after hearing, upon violation of any provision of this code or any regulation or order made by the department of health.

SEC. 6. No vehicle conveying any such substance mentioned in section 5 shall stand in any street or other public place at any time except when being loaded, nor be stored or cleaned within 300 feet of any dwelling.

SEC. 7. None of the material collected, conveyed, or handled under sections 4, 5, and 6 shall be disposed of within the town of Greenwich in any manner or at any place disapproved of by the department of health.

SEC. 8. Every vehicle and receptacle used under any permit or license from the department of health shall be such as is approved by the said department, and shall be kept clean and sanitary.

SEC. 9. Every vehicle licensed under this article shall have its license number conspicuously displayed upon each side thereof in figures at least 4 inches high.

Offensive Trades—Regulation of. (Reg. Bd. of H., Oct. 15, 1915.)

ART. 10. SECTION 1. No person shall erect or maintain any manufactory or place of business dangerous to life or detrimental to health or any place in which unwholesome or deleterious odors, gas, smoke, deposit, dust, or exhalations are generated without a permit from the department of health; and all such establishments shall be kept clean and sanitary; nor shall any offensive or deleterious waste substance, refuse, or injurious matter be allowed to accumulate upon the premises or be thrown or allowed to run into any public waters, stream, water course, street, road, or public place. Every person conducting such manufactory or business shall use the best approved appliances and all reasonable means to prevent the escape of smoke, gases, and odors and to protect the health and safety of all operatives employed therein.

SEC. 2. All persons engaged in the business of boiling or rendering fat or lard of animal matter, shall cause the scrap or residuum to be so dried or otherwise prepared as effectually to deprive such material of all offensive odor and to preserve the same entirely inoffensive, immediately after the removal thereof from the receptacles in which the rendering process may be conducted.

Nuisances—What Constitute. (Reg. Bd. of H., Oct. 25, 1915.)

ART. 11. Each of the following specific acts, conditions, and things is hereby declared a nuisance and is prohibited.

(a) The deposit or accumulation of any foul, decaying, or putrescent substance, garbage, dead animal, fish, animal matter, vegetable matter, or the contents of any privy or cesspool or other offensive matter upon any lot, street, or highway or upon any public or private place.

(b) A polluted well, spring, or stream or the pollution of any body of water used for drinking purposes.

(c) Any building or room kept in such a state of uncleanness, or the crowding of persons in any building or room in such a manner, as to endanger the health of the persons dwelling therein or other persons; or so that there shall be less than 400 cubic feet of air to each adult and 150 cubic feet of air to each child under 12 years of age occupying such building or room.

(d) Any room used as a sleeping room, unless every part of the ceiling of said room shall be 4 feet or more above the level of the ground outside.

(e) Any room occupied as a sleeping room which is not lighted and ventilated by means of at least one window opening to the outer air; any building or portion thereof occupied as a dwelling which is not provided with a plentiful supply of pure water; or which is not provided with at least one water-closet or privy for every two apartments of three rooms, or less, each, and one such closet or privy for every apartment of four rooms or more; or which is not provided for each family with one sink connected to a sewer or a properly constructed cesspool, if no sewer is available; or which is provided with plumbing not kept at all times in a sanitary condition.

(f) Water in which mosquito larvæ breed.

(g) The accumulation of manure in such manner or quantity as to drain on to, or cause offensive odors, or flies upon, any public road or place, or the premises of another person.

(h) Any privy that is not of substantial construction, that is not fly proof, that is not provided with a self-closing seat or seats.

(i) Any cart, tank, or barrel used in removing the contents of privy vaults or cesspools that is stored or cleaned within 300 feet of any dwelling.

(j) Any premises that are not provided with a sanitary water-closet or privy vault for all persons working thereon.

Department of Health—Definition of Terms Used in Regulations—Duties of Health Officer. (Reg. Bd. of H., Oct. 15, 1915.)

ARTICLE 1. SECTION 1. The words "department of health" and "said department" as hereinafter used shall include the board of health and the town health officer of the town of Greenwich, and such inspector, inspectors, and assistants as are authorized and empowered, with such board of health and health officer, to care for the public health within the town of Greenwich, and to enforce the laws and regulations pertaining thereunto.

SEC. 2. The term "person" as used in this code shall be construed to mean any person or persons, corporation, or association of persons.

SEC. 3. It shall be unlawful for any person to obstruct or interfere with the department of health or with any officer, agent, or employee of said departments in the performance of any of the duties imposed by the laws of the State or by this code.

SEC. 4. The health officer is hereby authorized and directed whenever a complaint is made or whenever he believes that communicable disease prevails, or that any sanitary ordinance has been violated, to inspect or cause to be inspected such premise or locality, or the inmates thereof, and shall take such steps to abate the nuisance, correct the violation of sanitary ordinance, or control the communicable disease, as he deems advisable.

SEC. 5. It shall be unlawful for any person falsely to represent himself or herself to be a member, officer, agent, or employee of the board of health.

HACKENSACK, N. J.

Communicable Diseases—Notification of Cases—Quarantine—Placarding—Hospitalization—School Attendance—Removals—Burial. (Reg. Bd. of H., Jan. 7, 1915.)

SECTION 1. That in case any person shall die from typhus, yellow, ship, or scarlet fever, cerebrospinal meningitis, cholera, smallpox (including varioloid), diphtheria, or from any other communicable disease, that may be hereafter specified and declared by this board to be dangerous to the public health, the funeral of such persons shall not be public or at any church or place of public worship, but shall be strictly private. No person shall invite thereto, or to any services connected therewith, or permit to be present at such funeral or at such services, any person or persons whose attendance is unnecessary. Any person offending against any of the provisions of this section shall forfeit and pay a penalty of \$50.

SEC. 2. That every physician shall report in writing, to this board the name and residence of every person under his care affected with cholera, smallpox (including varioloid), chicken-pox, diphtheria, membranous croup, cerebrospinal meningitis, yellow, ship, typhus, typhoid, or scarlet fever, measles, pulmonary and laryngeal tuberculosis, mumps, whooping cough, epidemic dysentery, or any other communicable disease that may be hereafter declared by this board to be dangerous to the public health; and such report shall be made within 24 hours after such physician shall have reasonable time and opportunity of ascertaining the nature of such disease. Any physician offending against any of the provisions of this section shall forfeit and pay a penalty of \$50.

SEC. 3. Whenever there shall occur any case of cholera, smallpox (including varioloid), diphtheria, membranous croup, cerebrospinal meningitis, yellow, typhus, or scarlet fever, the board of health or its authorized agent shall place upon the house or houses, in which said case or cases are confined, placard bearing the word "Quarantine," and naming the disease whenever deemed advisable by the board of health. Whenever a placard shall be placed upon a house as aforesaid, no person or persons except the medical attendant and nurse shall enter therein and unnecessarily depart therefrom without the permission of the board of health or its authorized agent, and whenever a house or building in the village of Hackensack shall have been quarantined by the board of health, the said quarantine shall not be raised, unless by special permission of the health officer, until the same has been maintained for the following periods, to wit:

In case of—

Scarlet fever, four weeks.

Measles, two weeks.

Chicken-pox, two weeks.

Mumps, two weeks.

Smallpox, four weeks.

Diphtheria, after one negative culture has been obtained and the original laboratory report thereof has been filed with the board of health.

Any person or persons violating any of the provisions of this section, removing or in any way covering, concealing, or obscuring any placard without authority of the board of health, shall, upon conviction thereof, forfeit and pay a penalty of \$50.

SEC. 4. That when it shall be deemed necessary by this board to determine the true character of any disease which it may have reason to believe communicable the person or persons affected with such disease may, by order of this board, be subjected to medical examination. And when such examination shall have been ordered by the

board, no person attending on or having the care of the person or persons to be subjected to such examination under said order, shall unnecessarily delay, hinder, or prevent the same.

Any person offending against the provisions of this section shall forfeit and pay a penalty of \$20.

SEC. 5. That no parent, master, guardian, or custodian of any child or other person shall needlessly expose or cause or permit to be needlessly exposed, such child or other person to the contagion or infection of any communicable disease.

No person having a child, servant, or other person in his or her family affected with any communicable disease, no nurse or other domestic having the care of such child, servant, or other person, and no member of such family, or boarder or visitor of such family, shall attend any public meeting or visit any place of public resort, or in any other manner subject any person or persons to danger of contracting such disease. Any person offending against any of the provisions of this section shall forfeit and pay a penalty of \$50.

SEC. 6. That in case any person within the jurisdiction of this board shall be affected by any communicable disease, such person shall, if deemed necessary by the health officer, be removed to such place as the health officer may order.

Any building infected by the presence of such person shall be thoroughly disinfected in the manner prescribed by the health officer; and all clothing, beds, bed-clothes, bedroom furniture, chairs, carriages, vehicles, and other articles which may have been contaminated or fouled by contact with such person, or because of use by such person, shall be thoroughly disinfected and cleansed, or, if necessary in the judgment of the health officer, destroyed.

It shall be the duty of every nurse who has been in attendance upon a patient or patients suffering with a communicable or contagious disease or diseases to properly disinfect his or her person and such of his or her wearing apparel, medical instruments, and other articles which may have been infected by the presence of said patient or patients, before acting as a nurse for any other person or persons whatsoever.

Any person failing to comply with any of the provisions of this section shall forfeit and pay a penalty of \$50.

SEC. 7. That it shall be the duty of any person knowing or having reasonable cause to believe that any other person within the limits of the jurisdiction of this board is affected with any communicable disease and is neglected or improperly cared for, so that it is probable that the disease will be communicated to others, at once to report the name and place of residence or lodging place of the person so affected and the facts and circumstances in the case to the health officer.

The following diseases are hereby declared to be communicable diseases: Scarlet fever, smallpox, diphtheria, cholera, cerebrospinal meningitis, yellow fever, and tuberculosis in any form.

Any person failing to comply with the requirements of this section shall forfeit and pay a penalty of \$10.

SEC. 8. That no person shall bring or cause to be brought within the jurisdiction of this board any person affected with any communicable disease except a permit from this board be first obtained. And no person shall bring or cause to be brought within the limits aforesaid any article or thing whereby there is reason to believe that any communicable disease may or can be communicated or propagated.

Any person offending against any of the provisions of this section shall forfeit and pay a penalty of \$20.

SEC. 9. That no person or persons shall, without the permission of this board, carry or remove, or assist in removing or carrying, or cause or permit to be carried or removed, any person affected with any communicable disease, from any vessel, railroad car, carriage, or other conveyance, or from any dwelling house, or other building within the limits of the jurisdiction of this board, to any other vessel, railroad car,

carriage, or other conveyance, or to any other dwelling house or other building. In case such permission is granted, the person or persons who shall carry or remove the person affected as aforesaid shall do so in the manner directed by this board at the time of giving such permission, and not otherwise.

Any person or persons offending against any of the provisions of this section shall forfeit and pay a penalty of \$20.

Contagious diseases.—SECTION 1. No person sick with a communicable disease shall leave or depart from the building or place in which he or she may be confined, or be allowed by the person owning or in charge of such building or place to leave or depart therefrom, and no principal, teacher, or superintendent of any school, and no parent or guardian of any child attending any school, shall permit any child sick with any communicable disease, or any child residing in any house in which such disease shall exist, to attend any school until such time as the attending physician certifies that it can be done without danger of communicating the disease to others, which time, however, may not be less in the several cases than the period hereinafter named, to wit:

In case of—

Diphtheria, after one negative culture has been obtained and the original laboratory report thereof has been filed with the board of health.

Variola and varioloid, four weeks.

Scarlet fever, four weeks.

Pertuses (whooping cough), six weeks.

Rubella (German measles), one week.

Rubeola (measles), two weeks.

Varicella (chicken-pox), two weeks.

Parotitis (mumps), two weeks.

Any person or persons offending against any of the provisions of this section shall, on conviction thereof, forfeit and pay a penalty of \$20.

SEC. 2. It shall, under the direction of the board of health, be the duty of the keeper of any hotel, tavern, boarding or public house, or the owner or occupant of any private residence or tenement house, where any person may be sick with any contagious or communicable disease, to close any such house or place and keep it closed as against all lodgers, customers, and persons desiring to visit same until such time as in the opinion of the board of health or the health officer all danger of communicating the said disease from any such house or place, or the inmates thereof, shall have passed; and no person or persons brought in direct contact with those so affected shall go about the city, or in any common or public or private place, so as to endanger the health of other persons: *Provided*, That the provisions of this section shall not apply to either the physician, clergyman, or nurse in attendance on such sick person or persons.

Any person or persons failing to comply with, violating, or offending against any of the provisions of this subject, where no other penalty is prescribed, shall, on conviction thereof, forfeit and pay a penalty of \$50.

Books of public libraries.—SECTION 1. No person from any dwelling wherein a disease dangerous to the public health exists, shall take any book or magazine to or from any circulating library without a permit from the board of health.

The board will inform the librarian of all cases of such diseases, and until a written permit is given, they shall allow neither books nor magazines to be taken to or returned from the dwelling where such case exists.

Any person or persons offending against the provisions of this subject, shall forfeit and pay a penalty of \$25.

Undertakers.—SECTION 1. It shall be the duty of every undertaker in New Barbadoes Township and of all undertakers, whether or not their place of business is within or without the township of New Barbadoes, having in charge the body of any person who shall have died from smallpox (including varioloid), cholera, diphtheria, membranous

croup, measles, scarlet typhus, yellow or ship fever, cerebrospinal meningitis, leprosy, or from any other communicable disease as shown by the certificate of the physician, before placing the body in a coffin or casket, to have the body wrapped in a sheet saturated with an approved disinfecting solution, and the coffin or casket shall be immediately and permanently sealed.

And no other person or persons, shall thereafter open the same. A public or church funeral shall not be held of any person who has died of any such communicable disease, but it shall be private and it shall not be lawful to invite or permit any person at the funeral of one who has died of such communicable disease, except the immediate family in the house. No undertaker shall use, or cause, or allow to be used, at any such funeral, or in any room where the dead body of such person shall be, any draperies, decorations, rugs, or carpets, belonging to or furnished by him or under his directions.

SEC. 2. Any undertaker who shall visit any house, which is quarantined, for the purpose of preparing a body, or for arranging for a funeral, shall first notify and obtain permission from a health officer. He shall follow all instructions and use all means which the health officer may direct, guard against and prevent communication or propagation of the disease.

SEC. 3. It shall be the duty of every undertaker, having notice of the death of any person within the township of New Barbadoes of smallpox (including varioloid), diphtheria, membranous croup, scarlet, typhus, or yellow fever, cholera, leprosy, or measles, or any other communicable disease, dangerous to the general health of the community or of the bringing of the dead body of any person who has died of any such disease into said township, to give immediate notice thereof to the board of health.

SEC. 4. All graves shall have at least 4 feet of earth between the top of the coffin and the surface of the ground.

SEC. 5. Any undertaker violating any of the provisions of this subject, shall be subject to a fine of \$50.

Common Drinking Cups—Prohibited in Public Places. (Reg. Bd. of H., Jan. 7, 1915.)

SECTION 1. It shall be unlawful to provide a common drinking cup in any public park, street or way, or in any building or premises used as a public institution, hotel, theatre, public hall or public school, or in any railroad station or railway car.

SEC. 2. Any person or corporation offending against the provisions of this section shall pay a penalty of \$15.

Foodstuffs—Sale and Protection—Condemnation of Unwholesome. (Reg. Bd. of H., Jan. 7, 1915.)

SECTION 1. No person, persons or body corporate shall manufacture, have, offer for sale, or sell any article of food or drink which is adulterated within the meaning of an act of the Legislature of the State of New Jersey entitled, "An act to prevent the adulteration of food and drugs," approved March 25, 1881, and the supplement thereto approved March 23, 1883, or of any act or acts of said legislature thereafter passed amendatory, supplementary, or additional thereto or in substitution thereof.

SEC. 2. No milk or butter nor any other food or drink, which has been exposed to the emanation or infection of any communicable disease, shall be brought into the village of Hackensack or held or offered for sale in said town.

SEC. 3. Every person or corporation being the owner, lessee, or occupant of any room, stall, vehicle or place where any meat, fish, fruit, vegetables or other food products designed or held for human food, shall be stored or kept or offered for sale, shall keep said room, stall, vehicle or place and its appurtenances in a cleanly and wholesome condition; fruits, vegetables, meats, and other food products shall be not displayed or exposed on the sidewalk or street, or outside of places of business unless such foods are securely covered by cases of glass, metal, or wood, or unless they are inclosed in tight

barrels, bags, or boxes: *Provided, however,* That this regulation shall not apply to fruits or vegetables which must necessarily be peeled before use, but such foods, when displayed outdoors, must be supported on platforms at least 18 inches above the sidewalk or ground. Prepared foodstuffs, such as bakers' goods and confectionery, dried fruits, cereal products, pickled products, meat products, or other foods prepared for eating or subject to the attacks of worms or flies, shall not be displayed for sale unless protected from flies, dust, dirt, and all other foreign and injurious contamination by suitable coverings of glass, metal, or wood.

SEC. 4. No cased, blown, plaited, raised, stuffed, putrid, impure or unhealthy or unwholesome meat, fish, birds, or fowls shall be held, bought, sold, or offered for sale as human food in any market, public or private, or in any place, public or private. Nor shall the carcass, meat, or flesh of any cattle, sheep, or swine, killed while in a diseased, overheated, feverish, or exhausted condition, or any calf, which shall be less than 4 weeks old, or any pig that shall be less than 5 weeks old, or any lamb that shall be less than 8 weeks old, be brought into or kept, sold, or offered for sale as human food in the village of Hackensack.

SEC. 5. No decayed or unwholesome fruit, nuts, or vegetables shall be brought into the village of Hackensack, or held, bought, or sold or offered for sale for human food, in any place, public or private, in said village.

SEC. 6. Whenever any member of the Hackensack Board of Health or any chemist, inspector, or other employee of said board shall find any meat, fish, bird, fowl, vegetable, or other food of a perishable nature exposed or offered for sale or had in possession with intent to sell, in violation of any of the provisions of this code, or in a state of rotteness or putrefaction, or in any condition which renders it, in his opinion, unwholesome or unfit for use as human food, he shall condemn the same, and cause it to be destroyed or disposed of in such a manner as to make it impossible to be thereafter used as human food.

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SEC. 8. Any person or persons offending against any of the provisions of this subject shall pay a penalty of \$50.

Ice—Sale of—Permit Required. Cold Storage. (Reg. Bd. of H., Jan. 7, 1915.)

SECTION 1. No impure ice or ice cut within or outside of the township of New Barbadoes from a polluted pond, lake, or stream, and no ice manufactured from impure water shall be used or sold within said township. No such ice shall be brought into the township for the purpose of use or sale: *Provided, however,* That such ice may be used for cold-storage purposes only, when permitted by this board; said permit issued in the same manner as the permits for like purposes.

SEC. 2. No wholesale dealer of ice shall sell to any person or persons, partnership or corporation, without having first thoroughly cleansed and washed said ice so as to remove therefrom all hurtful or noxious substances.

SEC. 3. All dealers in ice to assure a pure and healthful condition of the same shall, before placing the said ice in any wagon, cart, or vehicle, thoroughly wash and cleanse the same.

SEC. 4. No person or persons, partnership or corporation shall transport, sell, or distribute ice in the township of New Barbadoes without first having obtained a permit from the board of health, for each wagon, cart, or vehicle used in such transportation, sale, or distribution of ice.

SEC. 5. A separate permit shall be required for each office, station, store, depot, or other place used in the distribution or sale of ice; and such permit shall entitle the holder to one wagon, cart, or vehicle without the payment of any extra fee.

SEC. 6. Before any such permit shall be granted, an application shall be made to the board of health by the party seeking such permit, which application shall be signed by such party and shall state the post-office address of the applicant, the name

under which the business is to be conducted, the character of said business, whether wholesale or retail, the name of the party or parties from whom the ice is secured, the places where such ice is cut or manufactured, and the number of wagons, carts, or vehicles used by the applicant in the transportation, sale, or distribution of ice. Before such permit is granted the applicant shall pay to the said board of health a fee of \$2 for each and every wagon, cart, or vehicle used in the transportation, sale, or distribution of ice, which permit shall extend for one year from its date of issuance unless sooner revoked.

SEC. 7. Upon the request of the board of health any person or persons, partnership or corporation to whom any such permit shall be granted, shall at any time during the period thereof furnish any further information in writing which said board of health may demand of the nature required in the last preceding section. If such information is not furnished to the said board of health within five days after the request thereof, said permit shall be void, and thereafter no person or corporation shall be protected thereby in any manner whatsoever. Nothing herein shall prohibit the party whose permit is so forfeited from making an application for a new permit.

SEC. 8. No wagon, cart, or vehicle of any kind shall be used or run at any time by anyone for the sale or delivery of any ice in this township unless there be displayed on the right-hand side thereof a plate furnished by the board of health showing that said vehicle is owned, controlled, or used by a party to whom a permit has been granted, in accordance with the provisions of this ordinance.

No one except a party to whom a permit has been issued shall use any such tag or plate on any vehicle whatsoever, and no person shall make or use an imitation or copy of such plate. No such plate shall be used after the forfeiture, revocation, or expiration of the permit, the existence of which it indicates and is intended to show.

SEC. 9. All wagons, carts, or vehicles used in the transportation of ice shall not, while actually engaged in the same, be used for any other purpose whatsoever.

SEC. 10. Any person, persons, partnership, or corporation who shall violate, permit, or authorize a violation of any provision of this subject, shall, on conviction thereof, forfeit and pay a penalty of not less than \$10 or more than \$50 for each offense.

SEC. 11. This board may, at its discretion, issue permits to persons or corporations, permitting the said persons or corporations to harvest ice for cold-storage purposes only; such permits to cover a period of one year from the time of issuance or sooner if for good cause revoked, and to be granted only upon the payment therefor by the applicant of the sum of \$2 for each and every lake or pond from which the said ice is to be harvested. No ice shall be harvested for such purposes without a special permit.

Milk—Production, Care, and Sale. (Reg. Bd. of H., Jan. 7, 1915.)

SECTION 1. All persons or corporations selling or offering for sale or exchange any milk within the limits of the village of Hackensack shall hereafter annually procure a license or permit from the Hackensack Board of Health, and one additional license for each wagon, cart, or vehicle used in the transportation, sale, or distribution of said milk. The fee for each license shall be the sum of \$2 and shall extend for one year from the date of its issuance, unless sooner revoked.

No wagon, cart, or vehicle of any kind shall be used or run at any time by any one for the sale or delivery of any milk in this village unless there be displayed on the right-hand side thereof a plate or license tag furnished by the board of health, showing that said vehicle is owned, controlled, or used by the person or corporation to whom a license or permit has been granted in accordance with the provisions of this ordinance.

SEC. 2. All persons selling or offering for sale or exchange any milk within the limits of the village of Hackensack shall be required to furnish a list of producers or sources from which they receive their supply. If at any time such persons shall receive their supply from sources different than the one named, they shall immediately notify the

board of health to such effect. They shall also, upon request, furnish a list of customers to whom their milk is supplied.

SEC. 3. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any milk which contains less than 11½ per cent of milk solids, or more than 88½ per cent of watery fluids, or less than 3 per cent of milk fats. Milk to which there has been added any water, drug, chemical preservative or other substance shall be deemed impure and the sale thereof is hereby prohibited.

SEC. 4. In the case of skimmed milk, such may be sold if the can, vessel, or package containing such milk shall have a metal label or tag of metal distinctly, durably, and permanently soldered in a conspicuous place upon the outside, and not more than 6 inches from the top thereof, with the words, "Skimmed milk" stamped, indented, or engraved on the label or tag in letters not less than 2 inches in height, and the several lines of which shall not be less than three-eighths of an inch in width: *Provided, however,* That every glass bottle, in lieu of such label or tag may have blown in it the words "Skimmed milk" in letters that shall not be less than 1 inch in height, and the several lines of which shall not be less than one-eighth of an inch in width, such milk shall only be sold or shipped in or retailed out of a can, bottle, vessel, or package so marked.

SEC. 5. No milk shall hereafter be sold or offered for sale or exchange in the village of Hackensack which shall be produced in dairies having a rating below 60 per cent as based on the score card adopted by the board of health of the State of New Jersey.

SEC. 6. The use of either distillery slops or fermented brewers' grains, as food, for milch cows is prohibited.

SEC. 7. Premises wherein milk is produced or handled which is intended for sale or exchange in the village of Hackensack, shall at all times be open for inspection to members of the board of health in this village. No person or persons shall receive a license if such privilege is refused.

SEC. 8. Retailers, or distributors collecting or receiving milk from several sources shall be rated at the grade of the dairy having the lowest mark, unless satisfactory evidence is given that milk of a better quality is kept separate.

SEC. 9. No milk from cows fed on swill or other putrescent substance shall be sold within the limits of the village of Hackensack.

SEC. 10. No milk shall be sold or offered for sale or exchange within the limits of the village of Hackensack that shall be obtained from cows for a period of 15 days before or 5 days after the normal time of calving.

SEC. 11. No milk shall be delivered, stored, or transported at a temperature exceeding 50° F.

SEC. 12. All milk sold in bottles shall be placed in said bottles at a place of production, under clean conditions, and in a room not intimately connected with cow stables or manure pile.

SEC. 13. All bottles used for distribution of milk shall be used for no other purpose. All bottles shall be cleansed by consumer before returning.

No bottles used for the distribution of milk shall be delivered or taken to any hotel, tavern, boarding or public house, or any private residence or tenement house, where any persons may be sick with any contagious or communicable disease. Any milk delivered or taken to any hotel, tavern, boarding or public house, or any private residence or tenement where any person may be sick with any contagious or communicable disease, must be poured from the receptacle in which it was first contained into one provided for said purpose.

SEC. 14. No method of using milk tickets whereby the tickets are used more than once shall be permitted.

SEC. 15. Samples of milk shall be furnished employees of the board of health on reasonable payment therefor.

SEC. 16. If at any time there shall occur among the persons engaged in the production or handling of milk intended for sale in the village of Hackensack, or in the house of persons so engaged, any contagious or infectious disease, such as cholera, smallpox, diphtheria, membranous croup, typhus or enteric fever, scarlet fever, measles, tuberculosis, or any other communicable disease that may hereafter be declared dangerous by the board of health of this village, the owner or tenant of such dairy shall notify this board immediately, and said board may order sale of milk from said dairy discontinued for such time as may be necessary, and no milk shall thereafter be sold from said dairy until special permit from this board be granted therefor.

SEC. 17. No milk shall be sold or labeled "certified milk" unless the methods used in its production shall conform to the standard and methods necessary to produce such milk and certified by an authority acceptable to the board of health of this village.

SEC. 18. Cattle shall at all times be kept in a clean condition and udders shall be washed, hand rubbed, or wiped with a clean damp cloth before milking.

SEC. 19. No milk shall be used, sold under a label or bottles [sic] as pasteurized milk unless the methods used in such pasteurization be acceptable to and approved by the board of health.

SEC. 20. Milk which is to be delivered or sold or offered for sale in said township shall immediately upon being drawn from the cow be removed from the stable to a room separate and apart from said stable, and immediately cooled by submerging the vessel in which the milk is contained in cool water to a depth equal to that of the said milk in the vessel or by some other method approved by said board. The above-mentioned room shall be properly ventilated and lighted and shall be used for no other purpose than that indicated above and shall at all times be kept in a clean condition.

SEC. 21. The said milk shall be delivered in bottles unless permission for delivery in another manner shall be granted by said board.

SEC. 22. Any person or persons offending against any of the provisions of this subject shall forfeit and pay a penalty of \$100.

Milk and Cream—Production, Care, and Sale. (Reg. Bd. of H., Dec. 28, 1915.)

SECTION 1. Any person desiring to engage, either as principal or agent, in the production, sale, or distribution of milk or cream within the town of Hackensack may make application therefor to the board of health, upon blanks to be furnished by the board, setting forth the locality from which such person or persons procure the milk or cream, also a full and complete list of the names and addresses of those from whom he purchases milk or cream, and also the place at or from which he desires to sell milk or cream, and whether he desires to sell raw or pasteurized milk or cream, or both. Said application shall also state whether the applicant desires to sell as principal or agent, and if as agent, give the name of his principal. It shall be signed by the applicant, and if granted by the said board a license shall be issued to him signed by the president and secretary of the board, in the following form:

BOARD OF HEALTH, HACKENSACK, N. J.

Milk License No.

..... of is hereby licensed to engage in the business of selling and distributing in the town of Hackensack (raw or pasteurized) milk and cream from (store or wagons) for a period of one year from the date hereof: *Provided*, That if such person or any of his employees, servants, or agents shall violate any ordinance of the said board in conducting said business, or any of the provisions of an act entitled "An act to regulate the production, distribution, and sale of milk or cream," approved March 30, 1914, or other statutory regulations of such sales, this license may, in the discretion of the board, be revoked by the board.

Dated at Hackensack, N. J., this day of 191...

The annual license fee shall be \$1 for each place at or from which milk is sold and \$2 for each wagon or vehicle used in the distribution thereof.

All persons engaged in the business of selling milk or cream in the town of Hackensack at the date when this ordinance takes effect who desire to continue the same must file their applications for a license not later than 10 days prior to the third Thursday of any month of each year. Licenses when granted shall be for a period of one year from the time of granting the same: *Provided*, That any licenses so granted may be vacated by the board in case the licensee or any of his employees, servants, or agents shall violate any of the provisions of the ordinance regulating the production, sale, and distribution of milk and cream, or any of the provisions of the act of the legislature of the State of New Jersey, entitled "An act to regulate the production, distribution, and sale of milk and cream," approved March 30, 1914, or other statutory regulations of such sales.

Persons desiring hereafter to commence the business of selling milk or cream in Hackensack may make their application at any meeting of the board, but in every case such new applications must be made as above provided.

License required.—No person shall sell or offer for sale in the town of Hackensack any milk or cream unless such person has obtained a license from the board of health authorizing him to make such sale. All persons having a license as required by this section shall at all times display such license in a conspicuous manner in the place where the milk and cream is kept for sale or distribution: *Provided*, That when such sale or distribution is made from a wagon or other vehicle such vehicle shall have displayed on the right side thereof either a metal license tag that will be furnished by the board of health upon application by the proper parties or a painted sign similar in lettering to the license tags furnished by the board and with the proper license number.

Any person who is licensed to sell milk or cream in the town of Hackensack shall immediately withdraw from the town any supply upon notification from the board that the producer of such supply has failed or refused to comply with any of the requirements that are or hereafter may be required of milk producers.

No milk shall hereafter be produced, sold, exposed for sale or delivered within the town of Hackensack unless it is produced and handled in accordance with the requirements of this article.

SEC. 2. No person shall hereafter engage in the sale or exposure for sale of milk within the town of Hackensack without first having filed with the board of health a true and complete statement of the locality from which all the milk they handle is produced, a complete list of the persons from whom the said milk is purchased, and a complete list of the localities from which ice for cooling purposes is obtained, and if at any time the place at which said milk is produced or the persons from whom the said milk is purchased or the locality from which said ice is obtained be changed the said board shall be notified immediately. At any time within three days of the receipt of a request therefor, any person engaged in the sale of milk in Hackensack shall furnish said board with a complete list of all persons to whom milk is regularly sold.

SEC. 3. All premises whereon milk is produced or handled for sale or distribution in the town of Hackensack shall be open to this board for inspection at any time, and owners of cows from which said milk is produced shall permit a veterinarian in the employ of this board to examine said cows at any time.

Such examination shall consist of any efficient and reasonable method that may be used by the said veterinarian to determine whether or not the cows are diseased.

SEC. 4. *Stables.*—Cows shall be stabled under light, dry, and well-ventilated conditions, and the stables shall conform in all respects to the requirements hereinafter set forth, viz:

(a) Any portion of a barn used as a cow stable shall be tightly sealed overhead, shall be entirely partitioned off from the rest of the barn, and shall not be used for the storage of farm utensils, nor for any other purpose.

(b) The walls and ceilings of said stables, not otherwise treated in a manner approved by this board, shall be whitewashed at least every six months.

(c) Stables shall have at least 2 square feet of unobstructed window glass per 500 cubic feet of air space, the windows to be arranged so as to light all portions of the stable effectively.

(d) Each cow shall have at least 3 feet in width of floor space when fastened in stanchions, and in all cases where no adequate artificial means of ventilation is provided, each animal shall have air space of at least 600 cubic feet. All cow stables shall be well ventilated at all times.

(e) All stables shall be provided with a tight, dry floor, and the manure drops or urine gutters shall be water-tight and shall be thoroughly cleaned at least twice each day.

(f) No manure, garbage, nor other putrescible matter shall be allowed within 100 feet of any cow stable, milk house, or cooling room; and the drainage from said buildings shall be such that no liquid wastes can collect within this distance.

SEC. 5. (a) *Cows*.—No milk shall be sold or offered for sale or distributed in the town of Hackensack except from cows in good health nor unless the cows from which it is obtained have, within one year, been examined by a veterinarian whose competency is vouched for by the State veterinary association of the State in which the herd is located and a certificate signed by such veterinarian has been filed with the board of health stating the number of cows in each herd that are free from disease. This examination shall include the tuberculin test, and charts showing the reaction of each individual cow shall be filed with this board. All cows which react shall be removed from the premises at once if the sale of milk is to continue, and no cows shall be added to a herd until certificates of satisfactory tuberculin tests of said cows have been filed with this board.

Every cow that is tested as required by the provisions of this section and found to be free from disease shall, immediately after such test is completed, be tagged in the following manner by the veterinarian who made the test: *Provided*, That if a cow is already tagged in compliance with this section no retagging will be required if the tag contains a proper serial number. The tag shall be attached to one ear of the cow so that it will be plainly visible and so that it can not be removed unless the ear be torn. The tags shall be serially numbered in a manner approved by the board and shall be of such construction that when once removed they can not be reused. (The board furnishes ear tags without cost to the dairyman.)

Each certificate that is filed as required by the provisions of this section shall state clearly how each cow is tagged, so that any such cow may be identified.

Any person who at any time, whether temporarily or otherwise, has in his herd or on his premises a cow or cows that have not been tagged as outlined above shall be considered as having willfully violated this ordinance and shall be liable to a penalty of \$25 for each cow not so tagged.

The owner of every cow that reacts to the tuberculin test shall notify this board in writing within 72 hours after the test is completed of the disposition that has been made of such reacting cow. The said notification shall also contain the name and address of the person to whom the reacting cow was sold or the name and address of the person by whom said cow was slaughtered.

Every herd in which more than one reactor is found to every 15 cows shall be re-tested at the end of six months in the manner hereinbefore provided for making tuberculin tests, and the records of such tests shall be filed with the board of health as required in the case of annual tests.

Every person who is licensed by the board to sell milk or cream in the town of Hackensack shall file, or cause to be filed, with the board of health, within 72 hours after the completion of a tuberculin test of any cow in a herd from which his supply is obtained, a chart showing full details of such tuberculin test, and such chart, to be accepted by the board, must show that temperature readings were made at least every two hours from the tenth to the twentieth hour after the cow was injected with tuberculin, and whenever at the twentieth hour a rising temperature is being recorded, additional temperatures must be taken and recorded until a definite reaction is established or the temperature of the cow drops to normal. The chart must also state the name of the manufacturer of the tuberculin used, the amount used, and the hour of injection. If the cow has been previously tested within a period of four months, or if the herd on the previous test showed a large percentage of tuberculous animals or of animals with a suspicious temperature, the amount of tuberculin used and the hours of reading temperatures shall conform to the best practice in such cases.

Every cow that has been admitted to the State of New Jersey within three months and added to a herd from which milk is produced for sale in Hackensack must be retested not less than 60 days and not more than 90 days after such admission to the State, and no cow shall be added to a herd unless such cow has been tested to the satisfaction of the board within three months.

In addition to the tuberculin tests already required by this section, the board may, when in its opinion the number of tuberculous cows found in a herd or the extent of the lesions found in said cows warrants such action, require by resolution that a herd shall be retested, and no raw milk or cream from such a herd shall be sold in the town of Hackensack until such a retest is made to the satisfaction of the board: *Provided*, That a five-day notice to make such a retest must be served by the board upon the person who is licensed to sell such milk or cream.

The board may also require that any cow that shows an irregular temperature at the time of a tuberculin test or that, in the opinion of the board, has not been properly tested, shall be removed from the herd, and no person shall sell in the town of Hackensack any raw milk or cream from any such cow until a retest has been made to the satisfaction of the board.

All tuberculin tests required by this section may be made by any regularly qualified veterinarian, unless the board can show cause why tests made by such veterinarian should not be accepted.

All tuberculin test charts that are filed with the board must have appended thereto a veterinarian's certificate as to the general health of all nonreacting cows.

No diseased cow or any cow that is in a condition to impair the healthfulness of the milk shall be allowed to remain in any herd from which milk is produced for sale in the town of Hackensack.

Every person who is licensed by the board to sell raw milk or raw cream in the town of Hackensack shall notify the board, or cause it to be notified, at once of the removal for any reason of any cow from any herd from which his supply is obtained. Such notification shall give the ear-tag number and the reason for the removal from the herd of any such cow, together with the name and address of the person who has just secured possession of the cow, in case such cow did not die or was not slaughtered on the premises. No Hackensack Board of Health ear tag shall be removed for any reason from any cow while such cow remains in the possession of a dairyman who produces milk or cream that is sold in Hackensack, and no cow that has been removed from a herd shall be returned to the herd without the knowledge of the board. When a cow is returned to a herd after calving the board shall be notified of the date of parturition.

No person shall sell any pasteurized milk or cream within the town of Hackensack unless a certificate signed by a regularly qualified veterinarian has been filed with the board within six months for every herd from which such supply is obtained.

Such certificate must state that the said veterinarian has personally examined every cow in the herd, and it must also state the number of healthy cows found and the number of diseased cows found, with the nature and extent of the disease in each case and the disposition that has been made of such diseased cows.

(b) Cows shall at all times be kept in a clean condition, and the udders shall be washed or wiped with a clean, damp cloth immediately before milking.

(c) No milk shall be obtained from any cow which has calved within 10 days or from any cow within 30 days before the normal time of calving.

(d) All milk shall be obtained from cows fed and watered under the following conditions: All food given to such cows shall be sweet and wholesome. The use of either distillery slops or fermented brewery grains is prohibited, and their presence on any dairy premises will be considered sufficient cause for the exclusion of the milk from such dairies from sale or delivery in said town. Water supplied to cows shall be pure and free from all contamination from stable or household wastes, and no spring or shallow well in or adjoining any stable yard shall be used for watering said cows.

The tuberculin test will not be required whenever the board by resolution permits or requires the pasteurization of a supply nor for cows producing grade B milk.

SEC. 6. (a) *Employees*.—All milkers and all other attendants handling milk in any dairy shall be personally clean. When entering upon their duties connected with the dairy their hands and outer garments must be clean.

If at any time any person or persons having any connection with a dairy, or with the handling of milk, or any resident member of the family of any person so connected, shall be stricken with cholera, smallpox, diphtheria, membranous croup, typhus, typhoid or scarlet fever, measles, tuberculosis, syphilis, or any other communicable disease that may hereafter be declared by this board to be dangerous to the public health, notice shall be given to said board immediately by the owner or owners of such dairies, and said board may order the sale of such milk discontinued for such time as it deems necessary. No milk produced from the dairy of any person failing to give notice shall hereafter be sold or exposed for sale or delivered in the town of Hackensack until special permission therefor has been granted by said board.

All persons, including milkers, who come in contact with milk or cream before it is sealed in the final container must be free from all communicable diseases as shown by a medical examination made every three months, and no person shall sell any milk or cream in the town of Hackensack until a certificate signed by a regularly licensed physician, who is approved by the board, that such persons have been examined by the said physician within 30 days and show no evidence of any communicable disease has been filed with the board of health. Such examinations shall include any tests that the board may, by resolution, prescribe. Like certificates shall be filed with the board of health on the 1st day of January, April, July, and October of each year, based upon examinations that have been made of all such persons during the previous month: *Provided*, That such certificates will not be required for those persons who handle milk and cream that are to be pasteurized. Additional certificates must be filed for new employees as soon as they begin their duties. All certificates must be on forms furnished by the board and must give the name of every person examined.

(b) *Utensils and methods*.—Utensils used for the collection and transportation of milk shall, before being used, be thoroughly washed with pure water and soda or soap, or by some other approved means, and then sterilized by steam.

(c) As soon as milk is drawn from a cow, and before straining, it must be removed from the stable to a separate room, where it shall be strained immediately. It shall then, within 45 minutes of the time of milking, and in a building separate from the said stable, be cooled to 50° F. or below, by some method approved by this board. The above-mentioned cooling room shall be properly ventilated and lighted, shall be

used for no other purpose than that indicated above, shall at all times be kept in a clean condition, and shall not be connected with any stable, barn, or dwelling.

(d) All milk shall be delivered in bottles, but no milk in partially filled bottles shall be sold or offered for sale.

Exception.—A special permit in writing may be granted by the board of health to deliver either milk, cream, or skim milk in another manner.

No tickets shall be used in connection with the sale or delivery of milk. No bottles shall be filled, capped, or recapped outside the dairy building regularly used for this purpose, and said bottling room shall at all times be kept in a clean and sanitary condition. Milk bottles shall be used for no other purpose than as receptacles for milk.

No person shall remove milk bottles from a building wherein a disease dangerous to the public health exists, or has existed until he has first obtained permission in writing from the board of health.

All rooms in which milk or cream is pasteurized or bottled and all rooms in which milk utensils are washed or sterilized shall be provided with a smooth, well-drained, nonabsorbent floor. Such rooms shall at all times be clean and light and shall be effectively screened between the first days of April and November of each year.

SEC. 7. (a) *Milk.*—Samples of milk shall be furnished this board by any producer or dealer at any time upon proper payment therefor.

(b) All milk held, kept, offered for sale, sold or delivered in the town of Hackensack shall be held, kept, offered for sale, or delivered under the following designations and no other, and in accordance with such rules or regulations as may be adopted by the Hackensack Board of Health, and shall conform to the following standards and requirements:

Certified milk.—1. Grade A milk—raw—tuberculin tested.

2. Grade B milk—raw—veterinarian's certificate.

3. Grade A milk—pasteurized—veterinarian's certificate.

4. Grade B milk—pasteurized—veterinarian's certificate.

5. Pasteurized skim milk—veterinarian's certificate.

Certified milk must comply with the requirements of the State act of April 21, 1909, and the standards of the American Association of the Medical Milk Commission.

(c) No milk or cream that contains any appreciable amount of sediment or foreign matter shall be sold, offered for sale, or delivered in the town of Hackensack, regardless of whether or not the bacteria count exceeds the limit set by this section. "Appreciable amount of sediment" shall be construed to mean anything more than a few minute particles in a quart of milk.

(d) The board of health may, from time to time, when in its opinion the public interest may require, permit, by resolution, the sale of milk that is produced under conditions other than as herein specified: *Provided*, That such milk is pasteurized by subjecting it to a temperature of 150° F. for 20 minutes, or by an equivalent process.

The board of health may, when in its opinion the public health require such action, require by resolution that any milk or cream supply shall be pasteurized, under the supervision of the board, and no person shall sell any such supply after he has been notified by the board to pasteurize it unless such supply is pasteurized under the supervision of the board: *Provided*, That such supply may be sold without pasteurization after the board, by resolution, decides that the necessity for such pasteurization no longer exists.

No person (who is licensed by the board to sell milk or cream) shall at any time pasteurize his supply, or permit any part of it to be pasteurized, without the written permission of the board, nor shall any dealer at any time sell as raw milk or cream without the written permission of the board, any supply that he has been authorized or directed by the board to pasteurize.

No pasteurized milk shall be sold in the town of Hackensack unless it is conspicuously labelled "Pasteurized." Said label shall also state the degree (temperature and length of exposure at that temperature) and date of pasteurization.

(e) No substance or compound shall be added to any milk which is to be exposed or offered for sale and no substance shall be subtracted therefrom.

(f) No milk shall be sold in Hackensack which is obtained from a dealer who handles in part a supply not approved by this board; and no person shall deliver or offer for sale in the town of Hackensack any milk unless the entire supply which he handles complies with the requirements hereinbefore set forth, unless satisfactory evidence is given this board that the two supplies are kept separate.

No milk or cream shall be sold in the town of Hackensack if it is handled or stored at a milk station, dairy, or distributing station at which a milk or cream supply not approved by the board, and not contained in a final container which is plainly labelled with the source of the supply, is handled or stored.

No milk or cream shall be sold in the town of Hackensack unless the container in which it is delivered has plainly marked thereon the name of either the producer or the vender of the milk or cream, and in case a license to sell milk or cream is granted to a dealer who handles separately more than one supply, such container shall in addition have marked thereon the source of the supply. No false or misleading statement or mark shall appear upon any container or be attached thereto.

(g) No milk shall be delivered, stored, or transported at a temperature exceeding 50° F.

No milk shall be sold from any store unless said store has adequate facilities for keeping said milk at a temperature below 50° F., and no milk shall be stored or sold at a temperature higher than 50° F. All milk shall be kept and delivered in the original bottles.

(h) No ice which is obtained from a source which is contaminated or which is so situated that it may become contaminated shall be used for cooling milk.

(i) Nothing in this ordinance shall be construed to prohibit from sale in the town of Hackensack any so-called "modified" milk, condensed or evaporated milk, or buttermilk when plainly labelled as such, provided the milk used in the preparation of said "modified," condensed and evaporated milk, or buttermilk be in accordance with the standards created by this ordinance. The sale of "modified" milk shall conform to chapter 40 of the State laws of 1911.

Sec. 8. *Penalty.*—Any person, firm, or corporation, either for themselves, their employees or agents, who shall violate any of the provisions of this ordinance, shall, upon conviction, forfeit and pay a penalty not to exceed \$100 for each offense.

LEOMINSTER, MASS.

Milk and Cream—Production, Care, and Sale. (Reg. Bd. of H., Sept. 29, 1915.)

RULE 1. All persons engaged in the business of selling, delivering, or distributing milk, skimmed milk, or cream, in the town of Leominster shall annually, upon the 1st day of May or within 30 days thereafter, make written application to the inspector of milk, on forms prescribed and furnished by the board of health, for a license. If any changes are made in the information given on the application blank, the department must be immediately notified.

RULE 2 (a) No person in the town of Leominster shall engage in the sale or distribution of milk, skimmed milk, or cream, without a license to do so.

(b) No milk, skimmed milk, or cream shall be offered for sale in the town of Leominster unless the premises upon which it is produced have been inspected by the inspector of milk and have received his certificate of approval, which certificate shall remain in force until revoked by the board of health.

RULE 3. Milk shall not be sold, offered for sale or distribution in the town of Leominster which was drawn from a cow within 15 days before or 5 days after parturition; or from a cow whose afterbirth has been retained more than 24 hours after parturition, until 7 days after the retained afterbirth shall have been completely removed; or from a cow whose udder is affected with any form of disease or accident.

RULE 4. No milk, skimmed milk, or cream shall be brought into, held, delivered, or offered for sale in the town of Leominster, unless from cows that are healthy, that are properly cared for, and kept in a stable which is properly located and is kept in a clean, wholesome, sanitary condition, under such regulations as the board of health may impose.

RULE 5. No milk shall be produced, kept, sold, or offered for sale in the town of Leominster unless it has been strained, mixed, and cooled as soon as it is drawn from the cow, in a suitable room which is acceptable to the board of health.

RULE 6. Milk, skimmed milk, or cream kept for sale in any store, restaurant, market, bakery, or any other establishment shall at all times register on test not higher than 50° F., and shall be stored in a covered cooler, box, or refrigerator. No vessels containing milk for sale shall be allowed to stand outside said cooler, box, or refrigerator except while a sale of said milk is being made. Every such cooler or refrigerator shall be properly drained and cared for and shall be kept tightly closed except during such intervals as are necessary for the introduction or removal of milk or ice. They shall be kept only in such locations and under such conditions as shall be approved by the board of health.

RULE 7. No milk, skimmed milk, or cream shall be brought into or carried within the town of Leominster for purposes of sale which has been carried upon any wagon or vehicle which is not clean and free from offensive odors or upon which swill, refuse, garbage, or decaying, unwholesome, or filthy matter is carried.

RULE 8. Milk shall not be sold in bottles except under the following rules:

Bottles must be washed clean in hot-water solution of soap and soda or some other alkali and then with hot water before filling with milk. Bottles must be filled at the dairy or creamery, and only in milk rooms provided for the purpose.

Milk must not be transferred from cans to bottles or other vessels on streets or at depots except when transferred to vessels of purchaser at time of delivery.

RULE 9. All milking and handling of milk shall be done only by persons whose hands and finger nails are perfectly clean and dry. No person shall permit his hands, fingers, lips, or tongue to come in contact with milk intended for sale for the purpose of testing it, or for any other purpose. Whenever milk is to be tested, a spoon or other suitable article must be used, and the testing implement must not be used for a second sample of milk until after it has been thoroughly cleaned in boiling water.

RULE 10. No person who has a sore throat, diarrhea, or is suffering from any other disturbance of the bowels, or has symptoms of any infectious or contagious disease, or who is caring for any person ill with such disease, shall do milking or have any part in the handling or care of milk intended for sale or which is for sale.

RULE 11. No milk delivered or sold within the town of Leominster shall, at time of delivery or sale, have a temperature of over 50° F. or contain more than 500,000 bacteria to the cubic centimeter. If found to be above 500,000, the delivery or sale of such milk shall be prohibited until the conditions under which the milk is produced and cared for have been improved so that it is within the standard of 500,000 bacteria per cubic centimeter.

RULE 12. All stables shall at least twice a year be thoroughly brushed and dusted and all cobwebs removed from the walls and ceilings and at least once a year shall be thoroughly whitewashed.

RULE 13. No milk shall be delivered in bottles or in other containers to any place where smallpox, scarlet fever, diphtheria, or typhoid fever exists. Any consumer desiring bottled milk may provide individual receptacles in which the milk can be

poured by the dealer, who shall retain the empty bottle or container. No bottle or other container previously left with any family in which a contagious disease occurs shall be removed therefrom except with the consent of the board of health in writing. Any dealer disobeying this regulation will have his license suspended or revoked.

RULE 14. Every person engaged in the production, storage, transportation, delivery, or distribution of milk to be sold in the town of Leominster shall notify the board of health immediately on the occurrence of any case or cases of diphtheria, scarlet fever, typhoid fever, or any other infectious or contagious diseases, either in himself or in his family, or amongst his employees or their immediate associates, or within the building or premises where milk is stored, handled, or distributed, and at the same time, shall suspend the sale and distribution of milk until authorized to resume the same by the said board of health.

RULE 15. For the purpose of enabling the board of health to carry out and enforce the provisions of these rules and regulations, the inspector of milk, acting as the only authorized agent of, or any other qualified inspector or agent of the board of health, or any member of said board, shall, at all times, have free access to all barns, stables, dairies, creameries, stores, wagons, and all other buildings or premises in which cattle are kept from which any part of the milk supply of the town of Leominster is obtained, or in which milk is received, kept, stored, bottled, canned, or offered for sale, for the purpose of making inspection of said premises, cattle, vehicles, cans, vessels, measures, and other utensils used in conducting and handling, sale and delivery of milk, and for the purpose of taking samples of milk for analysis or other tests to determine its quality.

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